

19980603.qrp v01\_n111.qrs.980603

Date: Wed, 3 Jun 1998 19:03:12 EDT  
From: qrp-l@Lehigh.EDU  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: QRP-L digest 1111

QRP-L Digest 1111

Topics covered in this issue include:

- 1) [12271] Gel-cell and wall charger  
by Mike - W0TMW <crucis@sky.net>
- 2) [12272] SOLAR: 2 JUN  
by Paul Harden <pharden@aoc.nrao.edu>
- 3) [12273] Need 300 microhenry coils  
by Bill Meara <wmeara@erols.com>
- 4) [12274] New Contest Announcement  
by "Marshall Emm" <mgemm@mtechnologies.com>
- 5) [12275] Ten Tec QRP rigs  
by Tom Bradbury <tbradbur@charlotte.infi.net>
- 6) [12276] Re: New Contest Announcement  
by Paul Harden <pharden@aoc.nrao.edu>
- 7) [12277] NWQ - Online  
by Rick Sealey <rsealey@infoave.net>
- 8) [12278] Re: Coax dipole questions  
by "Rud Merriam" <rmerriam@csi.com>
- 9) [12279] RE: Coax cable dipoles  
by "Prof. Arnaldo Coro Antich" <inforhc@mail.infocom.etecsa.cu>
- 10) [12280] Re: Elmer 101: Part 5 - Xmit Bandpass Filter Question  
by "Craig B. Johnson" <johns516@maroon.tc.umn.edu>
- 11) [12281] Artificial Ground and WWV Propagation Broadcasts.  
by "Vincent Ferme" <vferme@sprint.ca>
- 12) [12282] By-Pass For Joel / WA5CVM  
by DENNISMO@aol.com
- 13) [12283] Foxhunt Rules Please?  
by Dave Willey <dave@cads1.net>
- 14) [12284] Re: Foxhunt Rules Please?  
by Roger Hightower <n7kt@earthlink.net>
- 15) [12285] F/S MFJ 6M SSB/CW Tcwr  
by MNHopkins@aol.com
- 16) [12286] An easy antenna page  
by mwattcpa@earthlink.net (Marty Watt)
- 17) [12287] FS:T-T #216 RTTY Filtre  
by "Wilford D. Lindsey" <70511.3041@compuserve.com>
- 18) [12288] Grand Canyon Raft Trip  
by bcutter@teal.csn.net (Bob Cutter)
- 19) [12289] FS: 1.6 to 30MHz Low Distortion Linear Amplifier PCB, \$15

- by "Ed Pacyna" <pacyna@worldnet.att.net>
- 20) [12290] TenTec 1340 Review 1997 de K5FO  
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 21) [12291] last chance for keyer essay contest  
by Steven Weber <kd1jv@moose.ncia.net>
- 22) [12292] Identifying XTALs  
by Sam Billingsley <SBillingsley@usaninc.com>
- 23) [12293] VHF QRP field day antennas  
by MKBalvanz@aol.com
- 24) [12294] RE: Need 300 microhenry coils  
by Tracy@bytemark.com (Tracy)
- 25) [12295] Re: How big a battery?.... (part 2, long)  
by Andy Fox <foxes@theriver.com>
- 26) [12296] The search for the missing surface mount....  
by AA2Q0@aol.com
- 27) [12297] Re: Grand Canyon Raft Trip  
by Ed Loranger <we6w@qsl.net>
- 28) [12298] Elmer 101: SW30+ Bandpass Problem  
by Dale Scott <dcscott@us.ibm.com>
- 29) [12299] Info on DX-350 mods please  
by "Brockwell, Stephen E." <brockwse@fssec.army.mil>
- 30) [12300] Re: 1997-1998 Foxhunt Fireside Literature Awards  
by Bruce Rattray <rattray@gpfn.sk.ca>
- 31) [12301] Re: 1997-1998 Foxhunt Fireside Literature Awards  
by Ed Loranger <we6w@qsl.net>
- 32) [12302] Re: Audio/intercom wiring???
- by "Steve Galchutt" <n0tu@webaccess.net>
- 33) [12303] Re: QRP DAY CONTEST  
by Bruce Rattray <rattray@gpfn.sk.ca>
- 34) [12304] Re: New Contest Announcement  
by "Marshall Emm" <mgemm@mtechnologies.com>
- 35) [12305] Re: Need 300 microhenry coils  
by Leon Heller <leon@lfheller.demon.co.uk>
- 36) [12306] RE: Beacon? at 10.104.6?  
by Adrian Weiss <aweiss@usd.edu>
- 37) [12307] Re: Beacon? at 10.104.6?  
by "Michael A. Gipe" <mgipe@reliablemeters.com>
- 38) [12308] Re: Beacon? at 10.104.6?  
by Ed Loranger <we6w@qsl.net>
- 39) [12309] Re: Beacon? at 10.104.6?  
by KC5TJA <kc5tja@topaz.axisinternet.com>
- 40) [12310] Coupling your TX to your ANTENNA.  
by Ed Loranger <we6w@qsl.net>
- 41) [12311] RE: WA8MCQ Banquet Talk Disclaimer  
by Adrian Weiss <aweiss@usd.edu>
- 42) [12312] Re: Coupling your TX to your ANTENNA.  
by Bill Jones <kd7s@psnw.com>
- 43) [12313] Long wire feedline?

- by "Jerry McCollom" <jmc@cnd.hp.com>
- 44) [12314] Re: Coupling your TX to your ANTENNA.  
by Ed Loranger <we6w@qsl.net>
- 45) [12315] Rain on my Parade: the NORCAL Flame-War  
by Adrian Weiss <aweiss@usd.edu>
- 46) [12316] New Contest & Wrinkles  
by ki6ds@dpol.k12.ca.us (Hendricks, Doug)
- 47) [12317] Re: Beacon? at 10.104.6?  
by Adrian Weiss <aweiss@usd.edu>
- 48) [12318] Mid America QRP Meeting Announcement: June 14th  
by Mike - W0TMW <crucis@sky.net>
- 49) [12319] RE: Beacon? at 10.104.6?  
by Bruce Rattray <rattray@gpfn.sk.ca>
- 50) [12320] Ten Tec Argonaut II QRP \$500 plus extras!  
by k6hcj@juno.com (Marv Fagenson)
- 51) [12321] [Fwd: Re: Beacon? at 10.104.6?]  
by Fred Lesnick <flesnick@Quetico.tbaytel.net>
- 52) [12322] Ft Tuthill, again  
by Bob Hightower <ki7mn@dancris.com>
- 53) [12323] Re: Long wire feedline?  
by olyellr@iglou.com
- 54) [12324] Removing core from flyback  
by Steven Weber <kd1jv@moose.ncia.net>
- 55) [12325] Re: Long wire feedline?  
by "dave r" <elim@ime.net>
- 56) [12326] Re: Coupling your TX to your ANTENNA.  
by Ed Loranger <we6w@qsl.net>
- 57) [12327] SIERRA - Never tweak for power  
by "Peter Zenker DL2FI" <Peter\_DL2FI@csi.com>
- 58) [12328] HF/MM on a fiberglass boat - help pse  
by Jim <kj5tf@madisoncounty.net>
- 59) [12329] Re: 1997-1998 Foxhunt Fireside Literature Awards  
by Tellefsen Bob-CNSE97 <cnse97@lmpsil02.comm.mot.com>
- 60) [12330] Re: Identifying XTALs  
by Leon Heller <leon@lfheller.demon.co.uk>
- 61) [12331] Fw: Housecleaning!!  
by Wayne Alexander <walexander@wwn.net>

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Date: Tue, 02 Jun 1998 18:06:33 -0600  
From: Mike - W0TMW <crucis@sky.net>  
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [12271] Gel-cell and wall charger  
Message-ID: <35748579.7BFEACD9@sky.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

I've received an e-mail critical of me about my prior message concerning Tower Hobbies and their offer of 12V 5&7ah gel-cell and wall charger. Seems that I was wasting their time because I didn't post the exact html page.

Here it is: <http://www.towerhobbies.com/listings/listbatt.html>

I hadn't visited this website before. I pick the web page URL off the catalog cover. However, I was able to find the item in about 5 minutes scanning the product list for "batteries" and "chargers."

Perhaps I should've posted the ad in HTML format too!

No connection with Tower Hobbies, but I did order the charger.

Sheesh!

Mike - W0TMW

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=====
Mike Watson, W0TMW           QCWA Mbr # 28651, Chap. 35
Raymore, MO USA             Grid: EM28st ARCI# 9647
http://www.sky.net/~crucis
E-mail: crucis@sky.net      ARS# 352, QRP-L# 1489
=====
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Date: Tue, 2 Jun 1998 17:25:45 -0600 (MDT)  
From: Paul Harden <pharden@aoc.nrao.edu>  
To: qrp-l@Lehigh.EDU  
Subject: [12272] SOLAR: 2 JUN  
Message-ID: <Pine.SOL.3.91.980602170444.1934A-100000@zia>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

The sun had a fairly large coronal mass ejection (CME), but it's trajectory will not strike the earth. So at the moment, solar flux is slowly rising again, the geomagnetic field is quiet, so conditions should stay relatively quiet until something happens. A new area rotating into view is the closest candidate for some future activity.

Commented details from todays Solar Report follow for those interested.

72, Paul NA5N

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JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
SDF NUMBER 153 ISSUED AT 2200Z ON 02 JUN 1998

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 01/2100Z  
TO 02/2100Z:

SOLAR ACTIVITY REMAINED VERY LOW. NEW REGION 8232 (S19E74) ROTATED ONTO THE DISK. A MODERATE SIZE CLASS H SPOT WAS VISIBLE HERE AND TRAILER SPOTS MAY FOLLOW.

There are sunspots with and without a distinct magnetic field of their own. A "class H" spot is a single spot with a unipolar magnetic field (no N-S polarity) and surrounded by PENUMBRA, the filamentary darker material around some spots. However, penumbra is usually associated with BIPOLAR sunspots ... those where the magnetic field comes out of one spot (say polarized NORTH) and enters the sun through another spot (say polarized SOUTH). The spot where the magnetic field LEAVES the sun is called the TRAILER spot, and where it re-ENTERS the sun is called a LEADER spot. This report is saying that since this sunspot group rotated into view today, it must be temporarily classified as a single-spot with no distinct magnetic field (unipolar, or class H) ... but as more of the group rotates into view, it may have companion spots linked together by magnetic fields. Should this be the case, then the spot seen today would be the LEADER spot, and the one appearing tomorrow would be the TRAILER, connected together by a magnetic field.

So why is this a big deal? Well, maybe not a big deal, but sunspots connected together by a BIPOLAR magnetic field with growing penumbra are those areas with the potential of producing flares ... and thus will be an area watched closely over the next few days for a sudden disturbance.

A LARGE PROMINENCE NEAR ERUPTED SHORTLY BEFORE 02/1500Z AND CREATED A LARGE AND DENSE CORONAL MASS EJECTION THAT APPEARED TO PROPAGATE SLIGHTLY OUT OF THE ECLIPTIC PLANE.

The Earth, and the other planets, are located on an imaginary disk surrounding the sun called the ecliptic plane. The large release of material from this CME, slightly away from the ecliptic plane, is just a fancy way of saying it will NOT be hitting the Earth.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD BECOME LOW WITH OCCASIONAL C-CLASS EVENTS AND POSSIBLY AN ISOLATED M-CLASS FLARE. LIMB PROXIMITY OF THIS REGION HINDERS ACCURATE ANALYSIS.

As above, it appears more of this growing group has not yet rotated fully into view, that is, it is on the "limb" (very edge) of the sun, making observations very difficult.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 01/2100Z TO 02/2100Z:  
THE GEOMAGNETIC FIELD WAS QUIET TO UNSETTLED.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS  
EXPECTED TO BE QUIET TO UNSETTLED FOR THE NEXT THREE DAYS.

IV. PENTICTON 10.7 CM FLUX  
OBSERVED 02 JUN 105  
PREDICTED 03 JUN-05 JUN 108/112/114  
90 DAY MEAN 02 JUN 108

V. GEOMAGNETIC A INDICES  
OBSERVED AFR/AP 01 JUN 004/006  
ESTIMATED AFR/AP 02 JUN 007/008  
PREDICTED AFR/AP 03 JUN-05 JUN 007/008-007/008-010/010

-----  
Date: Tue, 02 Jun 1998 23:53:37 -0400  
From: Bill Meara <wmeara@erols.com>  
To: qrp-l@Lehigh.EDU, gqrp-l@blacksheep.org  
Subject: [12273] Need 300 microhenry coils  
Message-ID: <199806022354.TAA12874@smtp3.erols.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

The Mighty Midget RX calls for 300 microhenry slug tuned coils (Miller 4411 or equivalent) for use in the IF filter and in the BFO tuned circuit. Anybody have any ideas on sources for coils like this? I ordered some 300 microhenry coils from DigiKey, but was disappointed: the coils are very, very small! They come in little metal cans (PC mount) and I just dont think they will look good amidst the 6U8 tubes and the pill bottle wound coils!

Progress report: I got the power supply circiut running and have wired up the AF amplifier stage (it works). I will melt some more solder this morning!  
73 de N2CQR  
Bill Meara, Falls Church, Virginia  
wmeara@erols.com G-QRP #7965  
<http://www.mindspring.com/~johnmb/billm.htm>

-----  
Date: Tue, 2 Jun 1998 18:04:22 -0600

From: "Marshall Emm" <mgemm@mtechnologies.com>  
To: qrp-1@Lehigh.EDU, cqclist@mtechnologies.com  
Subject: [12274] New Contest Announcement  
Message-ID: <199806030003.SAA32141@edison.chisp.net>  
MIME-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7BIT

The Great Colorado Gold Rush  
(a.k.a. Fire In The Hole)

Sponsored by the Colorado QRP Club

It was Colorado, 1859. A land swindler had just published the first issue of the Rocky Mountain News in the settlement that would become Denver. A year earlier, small placer gold deposits were found in that old settlement, near the confluence of the South Platte River and Cherry Creek. And then came the big gold strikes! George Jackson discovered gold in Chicago Creek near Idaho Springs. John Gregory made his famous gold strike not far away, in Clear Creek Canyon. Prospectors dreaming of riches poured into the new gold camps of Central City, Black Hawk, Boulder, Colorado City, Gold Hill, Hamilton, Tarryall, and Pueblo. The fever ran high. The Great Colorado Gold Rush had begun!

Not even a century and a half later, the rush is on again. This time it's the rush to work all states, to join the ranks of DXCC, the desire to sound like a kilowatt but driven only by milliwatts - truly to rush to achieve the impossible.

In honor of our state's colorful history and exciting future, the Colorado QRP Club proudly announces The Great Colorado Gold Rush. This will be a QRP amateur radio contest of unparalleled magnitude, of incredible dimensions, of such unbelievable proportions that---well, it's really just a summer sprint. Two fast hours of heavy hitting. Do your best. Have fun, and good luck in the contest.

When: Sunday, July 19, 1998

Time: 2000-2200 UTC

Band: 20 meters only

Mode: CW only

Power: 5W maximum

Classes: W -- WIRE: single element wire; including dipoles, random wires, Zepp, doublets, inverted V, slopers, single element beams, single element loops, inverted L, etc.

V -- VERTICAL: verticals; including single element, ground

plane, trapped vertical, or anything with vertical polarization and omnidirectional pattern.

B -- BEAM: multi-element arrays/beams; including beams, multi-element loops, phased verticals, V-beam, rhombic, etc.

P -- PORTABLE: non-mobile temporary field station; may use any type of antenna.

If you are not sure about your antenna class, send us a description ASAP (via E-mail to [n1fn@mtechnologies.com](mailto:n1fn@mtechnologies.com) or [jmedley@ix.netcom.com](mailto:jmedley@ix.netcom.com)).

Operations may be conducted with different antennas provided all antennas are in the same class.

Exchange: RST + SPC + Class + CQC Member # or Pwr Out

Example: 559 C0 V 345 -or- 559 CT P 5W

Multiple contacts: the same station may be worked up to three times during the contest, provided a minimum of 30 minutes has elapsed since the last QSO with the same station.

Scoring: 3 points for first contact with a station.  
2 points for second contact with the same station.  
1 point for third contact with the same station.

Multipliers: all multipliers count once over all. Multipliers are SPC's and CQC members worked.

Final Score: QSO Points x SPC x CQC Members = Total Score

Logs: Submit logs showing time, callsign, exchange and QSO points for each station worked, show totals of multiplier points. Example:

Time	Call	SPC	Ant	Mem#/Pwr	Pts
2005	W0CQC	C0	V	132	3
2012	N1FN CT	W		151	3



2036	W0CQC	CO	V	132	2
2037	KA8OM	MI	P	5W	3
2115	W0CQC	CO	V	132	1

Etc.

-----  
Totals            3                    2                    12    etc.

Dupes:        W0CQC - 2005 2036 2115  
SPC:         CO CT MI  
CQC#:        132 151

Please include an alphabetical dupe sheet showing times and calls of multiple contact stations, SPC's and CQC Member numbers. Also include a description of your equipment, antenna(s) used, and power output. All submissions must indicate entry class and your mailing address including e-mail address if available.

Deadline: Logs must be postmarked or emailed no later than 30 days post contest. Logs received after this deadline will be used as check logs only.

Mail:    CQC Gold Rush

c/o Jan Medley, N0QT  
5770 Niagara St.  
Commerce City CO 80022-4030

E-mail:        jmedley@ix.netcom.com

(all E-mail submissions in ASCII format only)

CQC will post a list of received logs on its web site at:  
<http://www.mtechnologies.com/cqc>

Awards:        Awards will be given for the highest score in each class  
and the highest score in each state.

-----  
73

Marshall Emm

N1FN/VK5FN

n1fn@mtechnologies.com

Milestone Technologies

Software, keys, kits, tools...

<http://www.mtechnologies.com>

(303)752-3382

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Date: Tue, 02 Jun 1998 21:14:30 -0400  
From: Tom Bradbury <tbradbur@charlotte.infi.net>  
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [12275] Ten Tec QRP rigs  
Message-ID: <3574A376.5C8095FA@charlotte.infi.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Has anyone built/used the new Ten Tec QRP rigs? Is there a review around?

Tom, NU4G

-----  
Date: Tue, 2 Jun 1998 19:28:30 -0600 (MDT)  
From: Paul Harden <pharden@aoc.nrao.edu>  
To: Marshall Emm <mgemm@ntechnologies.com>  
Cc: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>  
Subject: [12276] Re: New Contest Announcement  
Message-ID: <Pine.SOL.3.91.980602191901.5086B-100000@zia>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

The Colorado Gold Rush Sprint, or whatever the official name, sounds like a bunch of fun for a short sprint. I plan on being there. I really like the idea of working the same station on the band providing 30 minutes has elapsed. That's a neat, new twist. The CQC gang has done it again. Great job fellas.

72, Paul NA5N

-----  
Date: Tue, 02 Jun 1998 21:39:44 -0400  
From: Rick Sealey <rsealey@infoave.net>  
To: qrp-1@Lehigh.EDU  
Cc: Bill Todd <bill@willapabay.org>  
Subject: [12277] NWQ - Online  
Message-ID: <1.5.4.32.19980603013944.0101533c@mail.infoave.net>  
MIME-version: 1.0  
Content-type: text/plain; charset="us-ascii"

Bill ...

NICE job on the newsletter!

Rick - W4SEA

-----  
Date: Tue, 2 Jun 1998 20:54:54 -0500  
From: "Rud Merriam" <rmerriam@csi.com>  
To: <faunt@netcom.com>, "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [12278] Re: Coax dipole questions  
Message-ID: <199806030209.WAA01859@hil-img-ims-4.compuserve.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

Strip the outer insulator. Where the braid appears push back just lightly then spread the braid apart so you have a hole large enough to pull a loop of the the inner conductor through the hole. Pull all the inner conductor out. Now you have the inner conductor and the braid of the same length. Hang as a dipole. You can also make a verticle by hanging the conductor and drooping the braid down 30-45 degrees. Use an SWR to get the angle set for a good ratio.

The ARRL handbook shows the technique of pulling the conductor through the braid.

Rud Merriam KD5DTV  
rmerriam@csi.com

-----  
> From: Doug Faunt N6TQS +1-510-655-8604 <faunt@netcom.com>  
> To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
> Subject: Coax dipole questions  
> Date: Sunday, May 31, 1998 3:55 PM  
>  
> Has anyone here successfully made an dipole by peeling the outer  
> shield of the appropriate length of coax back on itself? If so, any  
> hints on how to make it happen? My experiments so far have been  
failures.  
> I'm beginning to think that I'll have to cut the braid loose, slide it  
> back, and solder it together again.  
>  
> I'm looking for a light flexible antenna to be pulled up into the  
> rigging of a replica of an 18th century frigate, for a two week trip  
> and grounding will be problematical. I'm going to take the pieces for

> an W3EDP, but think that simple coax-fed units for 30M and 20M would  
> also be useful.  
>  
> 73, doug  
>  
>

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Date: Tue, 2 Jun 1998 22:25:42 -0300  
From: "Prof.Arnaldo Coro Antich" <inforhc@mail.infocom.etecsa.cu>  
To: <qrp-1@lehigh.edu>  
Subject: [12279] RE: Coax cable dipoles  
Message-ID: <01bd8e8e\$86265040\$07199e03@luis>  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Be aware that if you separate the braid AWAY from the center conductor, that will then work as a standard half wave dipole ...

The coaxial dipole we are dealing with here on the list is a very special antenna, in which the RF current, due to the skin effect, flows on the OUTSIDE OF THE BRAID as an ANTENNA CURRENT... while INSIDE the coax, the current flows in a standard trasmission line mode... TEM mode to be more precise for those reading this that have some nice wallpaper from engineering schools ! The choke STOPS the RF ANTENNA CURRENT at the quarter wave point ( maximum voltage, minimum current )... after the CHOKE, the cable behaves just like that... a coaxial cable, and it will not radiate from that place down...

I found out that the core from a flyback transformer seems to do the job quite well in place of a ferrite toroid... and at ZERO COST !!!

You may like to try that one ... I tested it on 40, 20, 15, 10 and 6 meters...

with excellent results... Another idea that might work is just to wind maybe 5, 6 or 8 turns of the coax at the quarter wave point, in a diamter of around

15 cm for a low band antenna... Yet another way of doing it , is placing ferrite rings to about 30 centimeters ( 1 foot ) of cable at the quarter wave point....

Arnie Coro C02KK

-----  
Date: Tue, 2 Jun 1998 21:43:54 -0500  
From: "Craig B. Johnson" <johns516@maroon.tc.umn.edu>  
To: <qrp-1@Lehigh.EDU>  
Subject: [12280] Re: Elmer 101: Part 5 - Xmit Bandpass Filter Question  
Message-ID: <000d01bd8e99\$b97169c0\$9bc55ea0@pentium>  
MIME-Version: 1.0  
Content-Type: multipart/alternative;  
boundary="-----\_NextPart\_000\_0006\_01BD8E6F.8A491000"

This is a multi-part message in MIME format.

-----=\_NextPart\_000\_0006\_01BD8E6F.8A491000  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: quoted-printable

Dale Scott wrote:=20

>  
>When I tweak T3 and T2 (while observing waveform on scope) I find the =  
setting for T3=20  
>that gives me the largest amplitude to be with the slug turned all the  
>way CCW (to the stop). T2's peak is roughly mid-way between the stops. =  
T3  
>never really shows a peak - just gets larger as I go CCW. Is this =  
okay?  
>  
>72 - dale/w7hlo

Dale,

I got EXACTLY the same result when I tweaked mine. I am wondering =  
also.

72/73  
- Craig AA=D8ZZ

-----=\_NextPart\_000\_0006\_01BD8E6F.8A491000  
Content-Type: text/html;  
charset="iso-8859-1"  
Content-Transfer-Encoding: quoted-printable

<!DOCTYPE HTML PUBLIC "-//W3C//DTD W3 HTML//EN">  
<HTML>  
<HEAD>

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<META content=3Dtext/html; charset=3Diso-8859-1 =
http-equiv=3DContent-Type>
<META content=3D'"MSHTML 4.72.2106.6"' name=3DGENERATOR>
</HEAD>
<BODY bgColor=3D#ffffff>
<DIV><FONT color=3D#000000 size=3D2>Dale Scott wrote: </FONT></DIV>
<DIV><FONT color=3D#000000 size=3D2>&gt;</FONT></DIV>
<DIV><FONT color=3D#000000 size=3D2>&gt;When I tweak T3 and T2 (while =
observing=20
waveform on scope) I find the setting for T3 </FONT></DIV>
<DIV><FONT color=3D#000000 size=3D2>&gt;that gives me the largest =
amplitude to be=20
with the slug turned all the<BR>&gt;way CCW (to the stop).&nbsp; T2's =
peak is=20
roughly mid-way between the stops.&nbsp;&nbsp; T3<BR>&gt;never really =
shows a=20
peak - just gets larger as I go CCW.&nbsp; Is this okay?</FONT></DIV>
<DIV><FONT color=3D#000000 size=3D2>&gt;</FONT></DIV>
<DIV><FONT color=3D#000000 size=3D2>&gt;72 - dale/w7hlo<BR></FONT></DIV>
<DIV><FONT color=3D#000000 size=3D2>Dale,</FONT></DIV>
<DIV><FONT color=3D#000000 size=3D2></FONT>&nbsp;</DIV>
<DIV><FONT color=3D#000000 size=3D2>I got EXACTLY the same result when I =
tweaked=20
mine.&nbsp;&nbsp; I am wondering also.</FONT></DIV>
<DIV>&nbsp;</DIV>
<DIV><FONT size=3D2>72/73</FONT></DIV>
<DIV><FONT size=3D2>- Craig&nbsp; =
AA&Oslash;ZZ</FONT></DIV></BODY></HTML>

```

-----=\_NextPart\_000\_0006\_01BD8E6F.8A491000--

-----

Date: Tue, 2 Jun 1998 23:03:28 -0400  
From: "Vincent Ferme" <vferme@sprint.ca>  
To: <qrp-1@lehigh.edu>  
Subject: [12281] Artificial Ground and WWV Propagation Broadcasts.  
Message-ID: <000d01bd8e9c\$2fef5ba0\$873267d1@vince>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

We recently had postings covering artificial RF ground and solar activity. I found two articles while going through my old magazine clippings that might

interest other list members.

The first one is from the April '91 issue of 73 magazine, it's by J. Frank Brumbaugh, KB4ZGC and describes how to build an artificial RF ground.

The other is from the November '91 issue of QST by Rus Healy, NJ2L and explains in details the information broadcast by WWV and WWVH at 18 minutes after each hour.

73 de Vince, VE3VFN.

-----

Date: Wed, 3 Jun 1998 00:12:36 EDT  
From: DENNISMO@aol.com  
To: qrp-l@Lehigh.EDU  
Subject: [12282] By-Pass For Joel / WA5CVM  
Message-ID: <97b6b00e.3574cd36@aol.com>  
Mime-Version: 1.0  
Content-type: text/plain; charset=ISO-8859-1  
Content-transfer-encoding: quoted-printable

Hi Gang -

This is QRP related in is as much as one of ours has gone under the knife= as=0Athey say. Has anyone heard how Joel Denison - WA5CVM is doing afte= r his=0Abypass surgery today? If anyone has please post or e-mail me dir= ectly.

Thanks es God Bless ya all.....

73's es 72's de Denny

Denny / AD6EZ  
Promise Keeper  
FISTS # 4570 / QRP-L # 1359  
10-X # 69158 / ARCI # 9637 / Six Club # 242

HAMing It Up Everyday In Goleta, CA

Section: Santa Barbara  
Long: 34.437 N Lat: 119.868 W=A0=A0=A0  
Grid: DM04BK=0A

-----  
Date: Tue, 02 Jun 1998 21:57:16 -0700  
From: Dave Willey <dave@cds1.net>  
To: qrp-l@Lehigh.EDU  
Subject: [12283] Foxhunt Rules Please?  
Message-ID: <3574D7AC.32ED@cds1.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=iso-8859-2  
Content-Transfer-Encoding: 7bit

>Date: Tue, 2 Jun 1998 18:41:32 -0400 (EDT)  
>From: Bob Patten <n4bp@bc.seflin.org>  
>To: QRP-L Reflector <qrp-l@lehigh.edu>  
>Subject: [12268] Lost Foxii

> Up to today, I've logged about an even dozen foxes on 10M. I  
>have been using NA to log with and keeping the other pertinent  
>information (names, qrp-l nr's, power, etc.) in a note file.

OK guys,

I'll bite. I've resently joined this list and have seen quite a few  
messages talking about HF foxhunting. Got me real interested.  
However I haven't seen mention of any rules / operating practices /  
info on how to become the fox vs being the "hunter" / information  
exchanges / yadda, yadda, yadda.

Can someone get me (and any other newbies to QRP) pointed in the  
right direction? It does sound like it would be fun....

Thanks a bunch!!

--

To send a reply please remove "NOJUNKMAIL" from the return address,  
and replace "AT" with "@"

Dave Willey  
e-mail: dave AT cds1.net  
amateur e-mail: kd6kwm AT cds1.net  
amateur packet: KD6KWM@KD6KWM.#NCA.CA.USA.NOAM

--

QRP-L #1567

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Date: Tue, 02 Jun 1998 22:20:16 +0000  
From: Roger Hightower <n7kt@earthlink.net>  
To: dave@cds1.net  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [12284] Re: Foxhunt Rules Please?  
Message-ID: <35747AA0.8085B119@earthlink.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Everything you need to know about the summer 10 Meter fox hunt is on  
KI7MN's page at <http://www.dancris.com/~ki7mn>

--

72/73, de Roger, N7KT - QRP-L #62 - Mesa, AZ  
"The problem with doing nothing is not knowing when you're finished"  
(Nelson DeMille)

-----  
Date: Wed, 3 Jun 1998 06:53:52 EDT  
From: MNHopkins@aol.com  
To: qrp-l@Lehigh.EDU  
Cc: 50mhz@qth.net  
Subject: [12285] F/S MFJ 6M SSB/CW Tcvt  
Message-ID: <8b2c57fc.35752b41@aol.com>  
Mime-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7bit

Picked up this MFJ at one friend's house and took it to another on way home.  
At second location we plugged it in and worked a VK3 on 2d call from Dallas.

Deal includes the MFJ 10W PEP 6M 50 to 50.300 transceiver, optional CW board  
from this year's Dayton, microphone, original box and manual. First friend  
wants \$225 on list of over \$300 and asks me to handle the details. Why is he  
selling? An ICOM-706 Mark II has obviated several of his rigs.

73 de ab5L, michael in dallas, student of Tecraft and International (ICM) ham  
products and mementoes of Six Meters' Golden Age: 1957-58  
Michael Hopkins  
Box 226841  
Dallas, TX 75222 MNHopkins@AOL.com

-----  
Date: Wed, 03 Jun 1998 13:16:53 GMT  
From: mwattcpa@earthlink.net (Marty Watt)  
To: qrp-l@Lehigh.EDU  
Subject: [12286] An easy antenna page  
Message-ID: <3575b85b.15869031@mail.earthlink.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: quoted-printable

Gang, I've put up a page with three antennas (DCTL, Full-wave loop, and =  
cage  
dipole). Let me know what you think. DCTL is a compact solution for =  
those  
(like me) dwelling on the cliffs.

<http://home.earthlink.net/~mwattcpa/hamradio.html>

=46ollow the "antenna farm" link.

--

72 es 73 de Marty, KM7W

-----  
=46ranklin, Tennessee <http://home.earthlink.net/~mwattcpa> =  
=20  
NorCal #2031 -- ARCI #7514 -- QRP-L #0953 -- AK/QRP #098 -- Grid EM65

-----  
Date: Wed, 3 Jun 1998 09:15:57 -0400  
From: "Wilford D. Lindsey" <70511.3041@compuserve.com>  
To: //QRP-L Discussion Group <QRP-L@Lehigh.EDU>, ">Ten-Tec Reflector"  
<TenTec@Contesting.Com>, ">MN/QRP Reflector" <mnqrp@qth.net>,  
"+Doc W.D. Lindsey/K0EVZ" <70511.3041@compuserve.com>  
Subject: [12287] FS:T-T #216 RTTY Filtre  
Message-ID: <199806030919\_MC2-3EFE-448D@compuserve.com>  
MIME-Version: 1.0  
Content-Transfer-Encoding: 7bit  
Content-Type: text/plain; charset=us-ascii  
Content-Disposition: inline

Gang:

I have for sale the following Ten-Tec item = #216 500 hz RTTY

filtre for 9Mhz IF. Excellent condition. \$63.00 shipped to CONUS.

72/73,

--Doc Lindsey/K0EVZ            Rochester, MN--Home of the Mayo Clinic.  
MWBC  
519-16th Street SE  
Rochester, MN 55904  
507/289-5108 (eves)

-----  
Date: Wed, 3 Jun 1998 08:01:32 -0600  
From: bcutter@teal.csn.net (Bob Cutter)  
To: qrp-1@Lehigh.EDU  
Subject: [12288] Grand Canyon Raft Trip  
Message-ID: <199806031401.IAA03646@mailrelay.sni.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

This fuzzy thinker is getting a crash course in heat transfer.

I mentioned the "discovery" that the flat black case on the SST and the ZM2 had to go and they have been repainted flat white. I now find that I "boiled" two or three of the AA batteries during the full sun shake down. The fact that the Duracells are 2/3 black plus the RS 8-AA battery case is black did the trick. It is a tribute to the SST that it still worked with the loss of the batteries. The battery case goes in the paint booth and perhaps we will use wide white adhesive tape to cover and hold the batteries in the case.

72, Bob KI0G

-----  
Date: Wed, 3 Jun 1998 10:17:39 -0400  
From: "Ed Pacyna" <pacyna@worldnet.att.net>  
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Subject: [12289] FS: 1.6 to 30MHz Low Distortion Linear Amplifier PCB, \$15  
Message-ID: <001101bd8efa\$5f840e20\$8367440c@ed>

I have 1 printed circuit board (PCB), soder plated and drilled, as shown in Figure 5 of Motorola application note AN779.

This application note describes a low distortion push pull stable linear

amplifier capable of up to 20W PEP output, using low cost components (MRF 476, MRF475 or equal) from 160 to 10M. The amplifier gain is capable of 25dB + (full output with less than 1W drive).

Price is \$15 shipped in US. Note: If needed, I can also provide any of the parts you may need to build this amplifier.

Ed, W1AAZ

-----  
Date: Wed, 3 Jun 1998 15:21:05 +0100  
From: adams@chuck.dallas.sgi.com (Chuck Adams)  
To: qrp-l@Lehigh.EDU  
Subject: [12290] TenTec 1340 Review 1997 de K5FO  
Message-ID: <199806031421.PAA21351@chuck.dallas.sgi.com>

Gang, here is my review.

Review of TenTec 1340 40M CW Transceiver Kit  
Review Version 1.00  
Chuck Adams, K5FO  
January 27, 1997

MFR: TEN-TEC, Inc.  
Address of MFR: 1185 Dolly Parton Parkway  
Sevierville, TN 37862  
423.453.7172 phone number  
Designer: Ten-Tec, Inc.  
Model: T-KIT Model No. 1340  
Size: 3.5" x 5.0" board  
Weight: 32.1 ounces for assembled kit with case  
PC board: Double sided non-plated-through, non-solder masked  
and silk-screened PC board  
Manual: 70+ pages 5.5x11" double sided Comb binding  
Power : 12 to 15VDC  
RX Drain: 35 mA (no signal) 80mA with ~S-9 signal and speaker  
This from manual specs.  
TX Drain: 800mA on transmit in manual for 3W output  
Ant Connection: SO-239 connector  
Pwr Connection: RCA phono jack (See personal note below)  
Key Connection: RCA phono jack

Aux out: RCA phono jack for accessories or 12V  
Modes: CW only  
Kit?: Yes. Complete with case and internal parts  
Bands: 40M with other bands to be shipped starting in Feb.  
LO/VFO: Osc with 4.000-3.930MHz out (7.000-7.070MHz tuning)  
Drift: Not measured at this time, not noticable  
Dial Range: Marked 0 to 100  
RX: SuperHet  
XMT: Yes. Rated 3W. Measured 2W into dummy and 2W into antenna at 12.44V Note: Toroids not compressed to max out to the 3W rated specs. Final output transistor a 2SC2166.  
  
Filter: Four crystal filter at 11.000MHz  
Selectivity: About 900Hz-1KHz  
RIT: Yes. Measured +/- 1KHz  
Gain: Audio.  
AGC: Yes  
Preamp: No  
Atten: No  
SPKR: Yes.  
Meter: No  
S Tone: Signal monitored. Adjustable level.  
VFO: Yes. Covers 70KHz of 40M band.  
Output: 3.0W not adjustable  
Internal Keyer: No optional keyer kit available  
QSK: Yes  
Price: \$101.00 US including shipping via UPS  
Availability: From Ten-Tec, Inc.  
Options: None known at this time  
Date of Review: January 27, 1997  
Author: Chuck Adams, K5FO  
Comments: Another fine rig from Ten-Tec.

This the first QRP Transceiver Kit from Ten-Tec in some time.  
TenTec historians can fill us in on this one.

This author had no trouble at any time in the assembly and believes that anyone taking their time and willing to very carefully and patiently put a kit together can do so without much difficulty. I'd recommend some experience on a small kit before tackling this one though, see notes below. No goofs and no missing or bad parts. But this usually the case in todays kit market from my experiences.

Ten-Tec chose to go with a Ten-Tec fabricated circuit board that is non-masked and non-plated through. The latter condition requires extra steps on assembly, such as soldering leads on the component sides in come critical areas. This

requires due diligence on the part of the builder, steady hand eye coordination and a small soldering tip. Use no more than a 25W soldering iron of good quality with a good tip. The builder will not be able to and should not use sockets in building this kit. It just will not work.

The assembly manual was done by Dan F. Onley, K4ZRA. The steps are line per component with a square to check off and you go. XCVR is built in phases.

Here are some notes and helpful hints that I hope Dan and TenTec can use.

1. Page 8 and 9, steps 1-27 and 1-28. Show L20 location on diagram page 6 of Assembly section. Easter egg hunt here.
2. Page 15. Toroid pictorial has wrong number of turns.
3. Page 22, Step 3-16. Seems to be wrong.
4. Phase 4, starting page 25 of Assembly section. Dan was doing good until here. Show parts in logical order starting at the lower right of diagram on page 24. By this point in the assembly the builder has probably gotten enough experience and confidence to follow the instructions. The way it is done now it is hide and seek for the location and paging back and forth to page 24 to see where things are.
5. !!Page 36. Move steps 6-24, 6-25, 6-26, to the point in previous pages where U2, R8, and R30 were placed on the board. At this point, the pins are surrounded by parts and difficult if not dangerous to get to with a soldering iron tip. Omission of these steps may cause the kit to not work.
6. Page 44 of assembly section. Show an option for those that want mono output for headphones. Leave the stereo plug in the kit, but wire for mono. Later the builder or next owner can update to stereo. Rather simple to do.

I followed the instructions to the letter through the first 3 phases. After that I had enough confidence to stop testing where I had to solder in temporary parts etc. Give me an optional (expert) section at the end if I skipped the tuneup steps on the receiver in between. Will save some time for the expert/experienced builder. The building and testing by phases will certainly aid a lot of builders.

I personally do not like to solder in a part or one lead of a part, do a test, then undo it and resolder. I like neatness in the final kit.

Overall the instructions are pretty good. I think they are detailed enough for the relatively new kit builder.

Please please pretty please TenTec, give me a one page schematic so I can later trace the circuits, not parts of the schematic placed throughout the manual. It will make repair and debugging for a lot of construction much easier and better. Make large enough print to read without a magnifying glass and ink line width doesn't make it unreadable.

In the can-we-make-a-recommendation department for improvements:

1. Please replace the RCA phono plug for power with a barrel connector. This is dangerous and a fire hazard as most QRPers use gel-cells and we all cringe to think what a resistor lead lying on the desk with this puppy out there on a 20Ahr battery could do when shorted. There is room in the back for such an installation and this author plans an immediate installation of same to match all the other rigs in the shack. Ask the NorCal group about the original NorCal 40 with RCA phono power connector.
2. Offer a speaker option, i.e. rig without speaker for those of us that will never use it and want a slightly lighter rig. I have mine in but not hooked up. I'd like a solid cover so that dust doesn't collect inside on the speaker as it is now.
3. Front panel hole for 1/4" stereo jack. Start with 1/8" and let us use tapered reamer to enlarge for those that have just gotta have 1/4". I use a Radio Shack conversion plug to 1/8" stereo now for the sets of headphones in use.
4. I reversed the wires on the tuning pot to increase the freq in a clockwise direction, the same direction that the 0-100 scale goes. Make a note in the manual that this can be done. 3->1 and 1->3 changed for this mod.
5. Put note early in manual about the flux coating, etc. I thought that the board was defective at first.
6. Add keyword index at end of manual.
7. The white silk screen on copper is difficult and tiring on the eyes after periods of time working on building kit. Go to black lettering?
8. Add circuit pad for optional buffered VFO output to feed an outboard display like those from OHR and S&S Engineering or other sources.
9. Main tuning dial give us a white stripe already on the dial. If we mess it up, we look bad. :- ) I was lucky.

Early personal observations from K5F0:

1. Nice QSK.
2. Nice AGC but some audio distortion on very strong signals. Maybe due to JFET mixer, not sure.
3. Nice Keying and getting nice on the air comments.
- 3a. Nice sidetone with adjustable level. Internal pot has very small adjustment slots and you may want to include a small tool.
4. Would like internal adjustment for varying transmit output.
5. Receiver seems to have excellent sensitivity.
6. Bandwidth may be just a little wide. Using OHR SCAF for BW reduction.
7. Good components throughout.
8. Picture of Paragon on cover a little misleading. :-)  
Can I get one in kit form???? How about an advanced kit next?
9. Measured 70KHz tuning range. No noticable drift.  
The latter a surprise considering the 4MHz range of the VFO.
10. Measured 1KHz + and 1KHz - on RIT.
11. Nice heavy duty case.
12. This kit now sets a price point of under \$100 for a Single-Band CW Transceiver with Superhet Receiver and 3W Transmitter with QSK with case.
13. Plenty of audio out. This surprised me what with the 100 ohm resistors in series with headphone outputs.  
Did clip the output to the speaker and 1/4 audio gain did provide plenty of audio out.

Frequency counter helps rapid alignment of VFO or general coverage receiver, else wait until final tuneup. I did receiver alignment and peaking using only ear sensitivity. Receiver works very well and can hear real weak signals in the atmospheric noise level.

14. This puppy worked from the very start to finish.  
All components were in the kit and clearly identifiable by the author of this review.

Receive mixer using a single J310 JFET. NE602s for BFO and transmit mixer. LM386 for audio amplifier and LM358 op amp for audio preamp and low pass filter. 4ICs and 19 transistors and 13 diodes. Some toroids to wind but detailed instructions on doing so.

This review the personal opinions of the author. I get no consulting fees or other remuneration from TenTec. Other feedback and discussions from other builders encouraged.



Let us hear how you did.

See web page below for pictures after late Monday, January 27th.

Chuck Adams K5FO Dallas,TX CP-60  
<http://reality.sgi.com/adams> adams@sgi.com

-----  
Date: Wed, 03 Jun 1998 09:30:35  
From: Steven Weber <kd1jv@moose.ncia.net>  
To: qrp-l@Lehigh.EDU  
Subject: [12291] last chance for keyer essay contest  
Message-ID: <3.0.3.16.19980603093035.2f8f627e@mailhost.ncia.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Howdy Gang,

We've gotten a number of great entrys to the LED keyer essay contest, but Conrad says he'd like to see more, so we're going to extend the deadline a few more days. We'll close the contest at midnight, EST this Friday. We'll give Conrad a few days to decide the winner and have him announce it some time Monday.

The prize is a LED keyer kit, mailed anywhere it's legal to mail it to.

To enter, send me an email and in 50 words or less, explain "Why I need a keyer"

Thanks to everyone who has entered so far. I'm glad I got someone else to decide the winner :-)

72,  
Steve, KD1JV....In the White Mountains of New Hampshire

"Melt Solder"

-----  
Date: Wed, 3 Jun 1998 10:41:51 -0400  
From: Sam Billingsley <SBillingsley@usaninc.com>  
To: "Qrp-L (E-mail)" <qrp-l@Lehigh.EDU>  
Subject: [12292] Identifying XTALs  
Message-ID: <21E06269B00ED111BE9B00805F6D0FA327B59D@MAILSERVER1>  
MIME-Version: 1.0

Content-Type: text/plain

I have a source in town for a limited number of XTALS in the range 6MHz to 12MHz. Various cases and lead types. I would like to build a CW XTAL filter (probably ladder type) but need to determine the operating characteristics before buying a bunch of these.

Is there a simple bench test setup that I can use to identify if the XTAL is designed for parallel or series operation? If so, is there a simple way to determine the amount of shunt or series capacitance needed?

Sam AE4GX

-----  
Date: Wed, 3 Jun 1998 10:38:03 EDT  
From: MKBalvanz@aol.com  
To: qrp-l@Lehigh.EDU  
Subject: [12293] VHF QRP field day antennas  
Message-ID: <80ea066f.35755fcf@aol.com>  
Mime-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7bit

Hello everyone!

Has anyone used a VHF kite or ballon based antenna? Some of my friends and I would like to do some thing like that for field day and the VHF QSO party. What kind of antenna would be best for this application? Could we just use a random wire and tuner antenna?

Thanks,  
Matthew, KC0AYG

-----  
Date: Wed, 3 Jun 1998 10:55:40 -0400  
From: Tracy@bytemark.com (Tracy)  
To: "'wmeara@erols.com'" <wmeara@erols.com>, "QRP-L (E-mail)" <qrp-l@Lehigh.EDU>  
Subject: [12294] RE: Need 300 microhenry coils  
Message-ID: <01BD8EDF.D0500C00.tracy@bytemark.com>

Try an L57 series shielded coil form from Amidon. It's a bit bigger, so it would look more at home with your big tubes ... You can wind them to almost any inductance. The diagram, formulas and data are online at

<http://www.bytemark.com/amidon/l57cf.htm>

Hope that helps!  
Tracy Markham, N4LGH #1453  
ByteMark / Amidon  
[www.bytemark.com](http://www.bytemark.com)  
800 679-3184

-----Original Message-----

From: Bill Meara [SMTP:wmeara@erols.com]  
Sent: Tuesday, June 02, 1998 11:54 PM  
To: Low Power Amateur Radio Discussion  
Subject: Need 300 microhenry coils

The Mighty Midget RX calls for 300 microhenry slug tuned coils (Miller 4411 or equivalent) for use in the IF filter and in the BFO tuned circuit. Anybody have any ideas on sources for coils like this? I ordered some 300 microhenry coils from DigiKey, but was disappointed: the coils are very, very small! They come in little metal cans (PC mount) and I just don't think they will look good amidst the 6U8 tubes and the pill bottle wound coils!

Progress report: I got the power supply circuit running and have wired up the AF amplifier stage (it works). I will melt some more solder this morning!  
73 de N2CQR  
Bill Meara, Falls Church, Virginia  
wmeara@erols.com G-QRP #7965  
<http://www.mindspring.com/~johnmb/billm.htm>

-----  
Date: Wed, 03 Jun 1998 08:04:13 -0700  
From: Andy Fox <foxes@theriver.com>  
To: AA2QO@aol.com  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [12295] Re: How big a battery?.... (part 2, long)  
Message-ID: <357565ED.4771EC0C@theriver.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Hello again,

In the last episode of the "How big a battery?" saga, we had determined that our virtual rig required 3.8 AH from the battery between charges. This, in turn, meant that the battery required 4.5 AH, and that 9 AH is a good size for the battery itself. Remember, the battery will last

longest if it is cycled between 100% and 50% charge. We need a way to bring the battery from 50% to 100% charge, or 4.5 AH.

There are many variables to play with here. I will use averages to simplify the explanation. Keep in mind that in the Northern Hemisphere, there are fewer daylight hours in the Winter, and more in the Summer.

Here in Tucson, AZ we get about 6 "peak sun hours" per day. We calculated that our battery requires 4.5 AH between charges. Does this mean "every day" or "each week?" It's up to you. For now, let's assume that our virtual rig is going to be used each day for the amount of time specified in Part 1. If we divide the number of Ampere Hours by the number of hours, we get Amperes. So, take  $4.5 \text{ AH} / 6 \text{ H} = 0.75\text{A}$ . We need 750 mA charging current from our Photovoltaic (PV) module.

Here is where you have to be careful reading specs. Here is some data for Solarex PV modules. Their website is [www.solarex.com](http://www.solarex.com) for those interested in their many other products.

MSX-10 Lite	0.58A	17.1V
MSX-5 Lite	0.27A	16.8V
SA-5	290 mA	17.5V
SA-2/12	145 mA	17.5V
SA-1	80 mA	17.5V

Note that the product of the Voltage and Current is Power. This is where the name of the module is derived. The PV module will put out the rated current up to the rated voltage. After that, it falls off to zero. This "maximum power point" is at the knee of the curve (sorry, no graphics!). The rated voltage is several volts higher than the battery voltage. This is necessary, or the module can't charge the battery. You will get a (nearly) constant Current from the module, NOT constant Power. Take the MSX-5 Lite, for example. Near the end of your charging cycle, your battery voltage may be about 14 Volts. Multiply this by the 270 mA current to get 3.8 Watts, not 5 Watts.

These specifications are given for 25 degrees C = 77 degrees F. The module efficiency decreases with higher temperature. Since the module is sitting in the sun, the module temperature is typically higher than the standard temperature. I'll skip temperature derating for simplicity. Stick with modules in the high 16/low 17 Volt area and you should be OK. Beware of "self regulating" modules with Voltage ratings around 15 V. They might work in the Arctic, but they are a no go in the Desert.

We have determined that we need 750 mA current. None of the modules above put out that much. Let's use the MSX-10 spec. to see how many hours would be required to charge our battery.  $4.5 \text{ AH} / 0.58\text{A} = 7.8$

Hours. It will take almost a day and a half to charge the battery. This is where economics come in. This is where you trade off price, size, weight for speed. Most people determine that they can wait longer to charge the battery. Maybe they don't really operate 20 hours every day. Play with the numbers to find out where you're comfortable.

Oh, there are limits to the rate at which you should charge the battery. "Gee, why can't I just charge the battery at 9 Amperes for half an hour?" You'll blow it up, that's why. A "good" charge rate is C/20, which means the battery capacity divided by 20. It translates to 5%. The absolute max charge rate (for Lead-Acid batteries) is C/10, or 10%. Our 9 AH battery has a "good" charge rate of 0.45 Amperes and a "max" charge rate of 0.9 Amperes. Let's see,  $.58 / 9 =$  about 6.5%. Not too bad - a C/15.5 rate.

You could use a smaller module with less output, but it would require more time to charge the battery. Again, economic trade off time! There is a limit on "how low you can go" in the other direction, too. For example, if you have an 1100 AH battery (yes, eleven hundred!), a 5W module would be a complete waste of time and money. I don't think that this should be an issue for QRP operating; I just wanted to point out that there is a limit there.

Now we've come full circle. We started with a rig with some operating requirements. We picked a battery, based upon those requirements. Then we found a decent compromise for charging the battery with a PV module. I have left out charge controllers on purpose. This is another economic decision. If you are at the rig/battery, it is possible to pay close attention to the battery voltage. For unattended charging or forgetful operators, a charge controller is a MUST. Plus, this post is quite huge already!

Watson, WB4EXW pointed out that there were a couple of articles on this topic in QST fairly recently, one of which covered system sizing quite well. This is absolutely correct. Those of you that keep back issues for more than a couple of months might want to find those articles and post which issues they can be found in.

Have fun, and feel free to post questions and corrections.

--

72/73 de Andy, KK7HV - QRP-L #1286 - Tucson, AZ

-----

Date: Wed, 3 Jun 1998 11:23:29 EDT  
From: AA2Q0@aol.com  
To: qrp-1@Lehigh.EDU  
Subject: [12296] The search for the missing surface mount....  
Message-ID: <9bb44ade.35756a72@aol.com>  
Mime-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7bit

Hello one and all,

I'm repairing another casualty of the QRP bone dig, my Radio Shack HTX-202.

There was an intermittenment whereby the power indicator (and subsequent power output) would drop in and in completely. Seemed if I squeezed the rig, or torqued the case screws a little, I could get the power lever indicator (and output power) back up again.

Well, it worked for months, until the Bone Dig, and then caput. No more power. No amount of squeezing could coax a watt out of this baby.

So I take it home, and open it up one more time, noticing something that I didn't notice before. Near the tapped hole for the center mounting screw (of the back case) is a surface mount component. It's rectangular, about an 1/8" square, and labelled for 'polarity' like a diode, with a white band across one of its soldered sides. It's labeled "10-10" on top, with "D1" just below it and a small "Z" or "2" or "S" in a little circle in the bottom corner (manufacturer's symbol?).

Needless to say, I can't find my paperwork anywhere, and the people at my local radio shack couldn't find their way out of a paper bag. Any body with a 202 or surface mount experience that can help me, please respond directly as I have a source ready to go, I just have to tell him what the part is, which I don't know. I want to say it's a diode, but then again, could be a Cap.

Thanks in advance.

Michael Lydick  
(AA2Q0)

PS: I can snap a digital picture and show you exactly where the part is, if anybody needs it.

-----

Date: Wed, 03 Jun 1998 15:33:03 +0000

From: Ed Loranger <we6w@qsl.net>  
To: bcutter@teal.csn.net  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [12297] Re: Grand Canyon Raft Trip  
Message-ID: <35756CAF.459E@qsl.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Yes Bob, last year during the BUBBA sprint I found my  
OHR-100 (Also Black), boiling away....

For now I'm planning on using a sun shield, but for  
backpacking QRP, I can see the advantage of all-white  
or reflective covers.

Good job.  
-Ed

Bob Cutter wrote:

>  
> This fuzzy thinker is getting a crash course in heat transfer.  
>  
> I mentioned the "discovery" that the flat black case on the SST and the ZM2  
> had to go and they have been repainted flat white.  
<snip boiled battery information>

--

72, Ed, WE6W/qrp CW ONLY; Proud Member: QRP-L/ARCI/Norcal/ARS/AR  
<http://www.qsl.net/we6w> (Enjoying Ham Radio every day.)

-----  
Date: Wed, 3 Jun 1998 11:41:15 -0400  
From: Dale Scott <dcscott@us.ibm.com>  
To: <qrp-l@Lehigh.EDU>  
Subject: [12298] Elmer 101: SW30+ Bandpass Problem  
Message-ID: <50301000212898900000002L002\*@MHS>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=iso-8859-1  
Content-Transfer-Encoding: quoted-printable

About a week ago I posted a problem I was having with the alignment of =  
Tx  
bandpass transformers on my SW30+. I have received a couple of excelle=  
nt  
suggestions that I would like to post to the group as I have received e=

mail  
from a couple other "students" who are experiencing the very same problem.

My original post was as follows:

>  
>When I tweak T3 and T2 (while observing waveform on scope) I find the setting  
for T3  
>that gives me the largest amplitude to be with the slug turned all the way  
CCW (to the stop). T2's peak is roughly mid-way between the stops.  
. T3  
>never really shows a peak - just gets larger as I go CCW. Is this okay?  
>

Glen, VE3DNL, suggested that perhaps my scope probe was adding enough capacitance to the circuit to cause this problem. Following his suggestion, I went ahead and installed the Q4 buffer (and related resistors) and redefined the alignment with my scope probe at the emitter of Q4 rather than the base. This effectively isolated the probe from the bandpass filters. The results proved to be quite interesting. There is now a definite peak about mid-range in T3. What is kind of weird is that as soon as I go slightly past the peak (CW) the signal degenerates into a real mess.

Dave Benson suggested a different solution which was to add 10-22pf capacitance across T3 (ie C32). I will try that this evening and report the results. I'm betting that the two solutions together solve the problem.

72 - dale/w7hlo

Dale C. Scott  
IBM -- Engineering Technology Solutions  
(206) 587-2784 8/277-2784

Internet: (work) dcscott@us.ibm.com  
(home) dcscott@ibm.net  
OV/VM: dcscott@ibmusm54



=

-----  
Date: Wed, 3 Jun 1998 10:51:48 -0500  
From: "Brockwell, Stephen E." <brockwse@fssec.army.mil>  
To: "'qrp-1@Lehigh.EDU'" <qrp-1@Lehigh.EDU>  
Subject: [12299] Info on DX-350 mods please  
Message-ID: <35AA076F63CED111AF860000F8BDCA84049B2B@alrsrv02>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="iso-8859-1"

I took advantage of the info on the closeout of the Radio Shack DX-350 shortwave receiver and got one for \$17 and change. Good radio and thanks again for the heads up.

What I am looking for is the info on a BFO (?) to allow reception of CW on the 40 meter band and any mod if possible to allow reception of the other ham bands. Always nice to have CW to listen to when waiting for someone to finish shopping in the yard/garden shops. She wonders why I don't mind driving her around!!

Thanks,  
Steve B. KC5TTY

-----  
Date: Wed, 3 Jun 1998 10:02:06 -0600 (CST)  
From: Bruce Rattray <rattray@gpfn.sk.ca>  
To: Ed Loranger <we6w@qsl.net>  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [12300] Re: 1997-1998 Foxhunt Fireside Literature Awards  
Message-ID: <Pine.SOL.3.91.980603100003.14295C-100000@gpfn1.gpfn.sk.ca>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

A very \*big\* congratulations Ed!.....story telling well done...72 -  
Bruce(VE5RC)

On Tue, 2 Jun 1998, Ed Loranger wrote:

> Thanks for putting this all together Mike. It really  
> augments the fox hunt -- reading all those stories  
> was great!  
>  
> Let's do it again next year!

>  
> Now where's that special frame...  
>  
> -Ed Loranger, "Certificate of Meritorious Merriment" :)  
> --  
> 72, Ed, WE6W/qrp CW ONLY; Proud Member: QRP-L/ARCI/Norcal/ARS/AR  
> <http://www.qsl.net/we6w> (Enjoying Ham Radio every day.)  
>  
>

-----  
Date: Wed, 03 Jun 1998 16:06:35 +0000  
From: Ed Loranger <we6w@qsl.net>  
To: Bruce Rattray <rattray@gpfn.sk.ca>  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [12301] Re: 1997-1998 Foxhunt Fireside Literature Awards  
Message-ID: <3575748B.342@qsl.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Bruce Rattray wrote:

>  
> A very \*big\* congratulations Ed!.....story telling well done...72 -  
> Bruce(VE5RC)  
>

!!!!

Same to you, you Scribe, you! Loved them stories.

And Bob's Golden Fox musical concerts were great too!

-Ed

--

72, Ed, WE6W/qrp CW ONLY; Proud Member: QRP-L/ARCI/Norcal/ARS/AR  
<http://www.qsl.net/we6w> (Enjoying Ham Radio every day.)

-----  
Date: Wed, 3 Jun 1998 10:00:20 -0600  
From: "Steve Galchutt" <n0tu@webaccess.net>  
To: "\"Low Power Amateur Radio Discussion\"" <qrp-l@Lehigh.EDU>  
Subject: [12302] Re: Audio/intercom wiring???  
Message-ID: <003601bd8f09\$604eda60\$844a460f@SG2939M.webaccess.net>  
MIME-Version: 1.0

Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Hi Gang, Thanks to all who passed allong helpful tips and experiences!

Sounds like shielding and/or putting in some conduit is a good idea. For all the future stuff that I might want to do ...2" might not be too big. ....and maybe 6" plastic for an antenna conduit through the foundation or sill to get my feedlines outside. And of course some kind of grounding feed through system as it exits the house!! Seems like you can never plan ahead enough!

72...Steve

-----  
n0tu - solar powered QRP & wire antennas @ 7,200' ASL  
Monument, Colorado - Grid Sq DM79nb  
homepage: <http://www.webaccess.net/~S&P/HRindex.htm>  
email: n0tu@webaccess.net

-----  
Date: Wed, 3 Jun 1998 10:08:24 -0600 (CST)  
From: Bruce Rattray <rattray@gpfn.sk.ca>  
To: Frank G3YCC <g3ycc@g3ycc.prestel.co.uk>  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [12303] Re: QRP DAY CONTEST  
Message-ID: <Pine.SOL.3.91.980603100537.14295E-1000000@gpfn1.gpfn.sk.ca>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

OK Frank...sounds like a fun idea...I'll try and hit the air, GMT, Tuesday evening and see what happens...maybe 20 mtrs will be open late.... I'm still a working type here so I'll be at the job during the day Wednesday, so Wednesday's out...hope everyone has fun....72 - Bruce(VE5RC+VE5QRP)

-----  
Date: Wed, 3 Jun 1998 10:45:19 -0600  
From: "Marshall Emm" <mgemm@mtechnologies.com>  
To: Paul Harden <pharden@aoc.nrao.edu>, Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [12304] Re: New Contest Announcement

Message-ID: <199806031644.KAA23405@edison.chisp.net>

MIME-Version: 1.0

Content-type: text/plain; charset=US-ASCII

Content-transfer-encoding: 7BIT

Hi, Paul--

>>like the idea of working the same station on the band providing 30 minutes has elapsed. That's a neat, new twist. The CQC gang has done it again. Great job fellas.

<<

Thanks for the plug! The multiple contact thing comes from Australia, where numbers are fairly small and especially with a "new" contest it helps to keep people busy, and interested.

73

Marshall Emm

N1FN/VK5FN

n1fn@mtechnologies.com

Milestone Technologies

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(303)752-3382

--

-----  
Date: Wed, 3 Jun 1998 09:59:41 +0100

From: Leon Heller <leon@lfheller.demon.co.uk>

To: wmeara@erols.com

Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>

Subject: [12305] Re: Need 300 microhenry coils

Message-ID: <W0DhrRA9BRd1Ew1V@lfheller.demon.co.uk>

MIME-Version: 1.0

In message <199806022354.TAA12874@smtp3.erols.com>, Bill Meara

<wmeara@erols.com> writes

>The Mighty Midget RX calls for 300 microhenry slug tuned coils (Miller 4411  
>or equivalent) for use in the IF filter and in the BFO tuned circuit.

>Anybody have any ideas on sources for coils like this? I ordered some 300

>microhenry coils from DigiKey, but was disappointed: the coils are very,

>very small! They come in little metal cans (PC mount) and I just dont think

>they will look good amidst the 6U8 tubes and the pill bottle wound coils!

How about rewinding some old valve-type IF transformers? You'll need to

find a junked valve radio, of course, or an old TV. Someone on the list is sure to have some.

Leon

--

Leon Heller: leon@lfheller.demon.co.uk <http://www.lfheller.demon.co.uk>  
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424  
See <http://www.lfheller.demon.co.uk/dds.htm> for details of my AD9850  
DDS system. See " /diy\_dsp.htm for a simple DIY DSP ADSP-2104 system.

-----  
Date: Wed, 3 Jun 1998 12:18:42 -0500 (CDT)  
From: Adrian Weiss <aweiss@usd.edu>  
To: QRP-L@fidoii.CC.lehigh.EDU  
Subject: [12306] RE: Beacon? at 10.104.6?  
Message-ID: <Pine.SOL.3.94.980603121727.14846A-100000@sunburst>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

An S6 signal has been sending dashes at about 35wpm on 10.104.6 for a long while. Is this a beacon of some sort?

73, Ade

-----  
Date: Wed, 3 Jun 1998 10:25:16 -0700  
From: "Michael A. Gipe" <mgipe@reliablemeters.com>  
To: <aweiss@usd.edu>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [12307] Re: Beacon? at 10.104.6?  
Message-ID: <026401bd8f14\$95d39030\$140a0a0a@double\_trouble.reliablemeters.com>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

This is the standard "I left the rig on and a book fell against the paddles" beacon. Every licensed ham is required to set up one of these beacon stations at least once in their career.

Mike K1MG

>An S6 signal has been sending dashes at about 35wpm on 10.104.6 for  
>a long while. Is this a beacon of some sort?

>

>73, Ade

>

-----  
Date: Wed, 03 Jun 1998 17:39:34 +0000  
From: Ed Loranger <we6w@qsl.net>  
To: mgipe@reliablemeters.com  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [12308] Re: Beacon? at 10.104.6?  
Message-ID: <35758A56.4602@qsl.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Hee, hee. A nearby ham was waiting to work me one night. He has some type of keyboard controller where he has to send something every 3 minutes. A dash or so to keep the program active or something...

This will start a mini-thread on operating practices, but what I do is one of two things when keeping the rig warm ---

- 1) Turn the power to minimum when the key is connected and I'm just listening.
- 2) Disconnect the key.

Disconnecting the key is preferred because when running QRP rigs one might not check the output power because you are absolutely certain you can't be above 5 watts. So if you lower the power to 1 milliwatt and call a station, it might be a whole minute of "What a'int workin'", until you realize you gotta turn the power pot up. :) Been there, done that and got the T-Shirt :)

72 all.

-Ed

Michael A. Gipe wrote:

>

> This is the standard "I left the rig on and a book fell against the

> paddles" beacon. Every licensed ham is required to set up one of  
> these beacon stations at least once in their career.  
>  
> Mike K1MG  
>  
> >An S6 signal has been sending dashes at about 35wpm on 10.104.6 for  
> >a long while. Is this a beacon of some sort?  
> >  
> >73, Ade  
> >

--

72, Ed, WE6W/qrp CW ONLY; Proud Member: QRP-L/ARCI/Norcal/ARS/AR  
<http://www.qsl.net/we6w> (Enjoying Ham Radio every day.)

-----  
Date: Wed, 3 Jun 1998 10:36:32 -0700 (PDT)  
From: KC5TJA <kc5tja@topaz.axisinternet.com>  
To: "Michael A. Gipe" <mgipe@reliablemeters.com>  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [12309] Re: Beacon? at 10.104.6?  
Message-ID: <Pine.LNX.3.96.980603103453.18909A-100000@topaz.axisinternet.com>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 3 Jun 1998, Michael A. Gipe wrote:

> This is the standard "I left the rig on and a book fell against the  
> paddles" beacon. Every licensed ham is required to set up one of  
> these beacon stations at least once in their career.

I thought those beacons were replaced by the 'I left the terminal logged  
into a chat server, and a book fell on the keyboard' beacons. I guess  
some people prefer doing things the older, and more reliable, way... :)

=====

KC5TJA/6		-  TEAM DOLPHIN  -
DM13		Samuel A. Falvo II
QRP-L #1447		<a href="http://www.dolphin.openprojects.net">http://www.dolphin.openprojects.net</a>

-----  
Date: Wed, 03 Jun 1998 17:42:35 +0000  
From: Ed Loranger <we6w@qsl.net>

To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [12310] Coupling your TX to your ANTENNA.  
Message-ID: <35758B0B.5261@qsl.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Has anyone done any work on concentric inductive coupling.

I'm thinking along the lines of using an outer coil on a PVC form and a smaller coil inside, wound on another PVC form and driven by a threaded rod to affect coupling and impedance transformation.

-Ed

--

72, Ed, WE6W/qrp CW ONLY; Proud Member: QRP-L/ARCI/Norcal/ARS/AR  
<http://www.qsl.net/we6w> (Enjoying Ham Radio every day.)

-----  
Date: Wed, 3 Jun 1998 12:53:19 -0500 (CDT)  
From: Adrian Weiss <aweiss@usd.edu>  
To: QRP-L@fidoii.CC.lehigh.EDU  
Subject: [12311] RE: WA8MCQ Banquet Talk Disclaimer  
Message-ID: <Pine.SOL.3.94.980603122022.14846B-100000@sunburst>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi gang: I finally had time to read the digests about Dayton.

(1)

I think I ought to set the record straight. I don't know whether Mike's disclaimer about being dragged into the "Mike and Ade Show" was triggered by negative comments or not, or by a perfectly natural desire on his part clarify to clarify his role. He might even have resented having to do this without any warning and without any opportunity to actually read over the material I gave him. I took two risks: (1) not having ever met Mike, I did not know whether he would be able to pull it off; and (2), whether he would react negatively to the imposition.

In regard to (1), as everyone who was there can testify, he did a great job. No need for any qualification.

In regard to (2), I do owe Mike an apology for springing this on



him out of the blue. At first, I wrote the talk intending to read everything myself, but I felt this nagging awareness of his presence behind me at the head table as I would be reading his own words. I didn't get the idea of having Mike read his material until a couple days before after receiving an e-mail about Dayton from George Dobbs in which he promised to provide me with a great introduction (which he did). I shared the "Mike and Ade Show" idea with George and he thought it would be a good idea.

In short, Mike had no foreknowledge of his role in my talk. Only George and I knew about it.

(2)

Yes, the talk was long. Before hand, I was unable to get any specifics about the length of my time slot. The only keynote speeches I've heard at ham banquets were at least a half-hour long, dry, and boring. Having decided upon a serious, important topic -- the history of the QRP movement since 1960 -- I decided to give it my best shot. It would be my one chance (as I understand it, keynote speakers do not do it in later years) to share my knowledge of the topic with the QRP gang. I spent a lot of time writing the talk and ended up tossing out a lot just to keep it down to 45 minutes. I don't know how long it went -- did anyone actually time it? I never did get any specifics on the expected length -- this point should definitely be clarified for future speakers. Since everything was running way behind schedule, i.e., food came at 7:45 and we were scheduled to be out of there by 8:30, I contemplated, while eating, the possibility of reading just one section. But I decided that, having put in the time to write it, and considering the importance of the material, to read the whole thing and take the flak.

Bottom line: when comedians say "you're a great audience," that is just part of their script. I sincerely mean it when I say that I was taken back by the enthusiastic response of the QRP'rs in the audience up until the final, serious section about K8IF. In all my years, I have never been "knocked off balance" by an audience response. I WAS at this banquet. Time and time again, I asked myself "What's going on here?" while waiting for the laughter and chatter to subside. This is one of the high-points in my life and I'll treasure it to my grave. I'll never do it again because it would never be as good as it was at Dayton 1998. So, I do apologize for the numb butts and the consternation at the head table. But most of all, I thank the gang of QRP'rs at the banquet for making me feel a sense of belonging far intenser than any I've ever felt before. And oddly enough, that was the topic of my talk and the feeling I wanted to generate in all of you! What an experience!

-----  
Date: Wed, 03 Jun 1998 11:07:18 -0700  
From: Bill Jones <kd7s@psnw.com>  
To: qrp-l@Lehigh.EDU  
Subject: [12312] Re: Coupling your TX to your ANTENNA.  
Message-ID: <357590D5.FDD0E0CD@psnw.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Ed,

What you're looking for is a variocoupler (not to be confused with a variometer). A variocoupler consists of a cylindrical coil inside of which is a second (smaller) coil, mounted at right angles to the larger coil. The smaller coil is mounted on a shaft-turned form. By rotating the shaft the smaller coil can be adjusted so that it is in parallel with, or as much as 90 degrees away from the larger coil.

I use homebrew variocouplers in my crystal set designs to adjust the amount of coupling from the antenna to the main tank coil. This controls the selectivity of the crystal set.

Ed Loranger wrote:

> Has anyone done any work on concentric inductive coupling.

=====  
Bill Jones - KD7S <><  
Sanger, California  
<http://www.psnw.com/~kd7s>  
=====

-----  
Date: Wed, 3 Jun 1998 12:10:59 -0600  
From: "Jerry McCollom" <jmc@cnd.hp.com>  
To: <qrp-l@Lehigh.EDU>  
Subject: [12313] Long wire feedline?

Message-ID: <001101bd8f1a\$f67dc080\$38620f0f@fcjmcp.fc.hp.com>  
Mime-Version: 1.0  
Content-Type: text/plain;  
    charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Could all of you QRP-L antenna masters give me some advice on my antenna and feedline situation?

I live in a covenant restricted neighborhood (I used to be president of the association -- shoulda changed the covenants then :-). Currently I've got a dipole in the attic, but I'd like to discreetly get a wire on the outside of the house.

So, I've got some of the #26 AWG "invisible" wire on order and plan on stringing a long wire from the peak of our roof over to a tree in back of the house. My calculations lead me to think I should be able to get a good 100' or more strung out. The question is how to feed it.

Currently, I've about 70' of RG 213 running from an MFJ 949E tuner in my basement hamshack up to the dipole in the attic. I'd like to use this to feed the longwire out the side of an attic vent, if possible.

Will it be sufficient to just ensure I've got a good ground on the coax shield down in the hamshack, or do I need to go with a different feedline? Do I need to feed it off the random wire side of the tuner instead of the coax connector? Maybe I should backup and ask if doing a longwire outside is going to be any better than my attic dipole? (It's a W9INN shortened 80-10 dipole).

My web searching didn't help me answer any of these questions, so thanks for any help you can offer!

Jerry, W0MC  
QRP-L #800

-----  
Date: Wed, 03 Jun 1998 18:21:27 +0000  
From: Ed Loranger <we6w@qsl.net>  
To: kd7s@psnw.com  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [12314] Re: Coupling your TX to your ANTENNA.  
Message-ID: <35759427.63E6@qsl.net>

Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Actually Bill, I'd appreciate any additional mathematics with this too, if you have any.

I am aware of both methods of loop coupling. (Here comes the thread)

Last month I mentioned the 1979 ARRL Hdbk and a tuner with twin loops on a common shaft -- Your Variocoupler. In fact, this single-band Antenna tuner is on the front cover! Anybody seen it?

But I'm looking specifically for a plunger-style method. Like when you couple a GDO to a circuit where you slide the gdo coil into a larger coil. Also any practical information from "the qrp-1 gang".

But the variocoupler information got no response last month so it is still needed.

Thanks for the response Bill and I hope others can jump in too.

72 all,  
-Ed

Bill Jones wrote:

>  
> Ed,  
>  
> What you're looking for is a variocoupler (not to be confused with a  
> variometer). A variocoupler consists of a cylindrical coil inside of  
> which is a second (smaller) coil, mounted at right angles to the larger  
> coil. The smaller coil is mounted on a shaft-turned form. By rotating  
> the shaft the smaller coil can be adjusted so that it is in parallel  
> with, or as much as 90 degrees away from the larger coil.  
>  
> I use homebrew variocouplers in my crystal set designs to adjust the  
> amount of coupling from the antenna to the main tank coil. This  
> controls the selectivity of the crystal set.  
>  
> Ed Loranger wrote:  
>  
> > Has anyone done any work on concentric inductive coupling.

>  
> =====  
> Bill Jones - KD7S <><  
> Sanger, California  
> <http://www.psnw.com/~kd7s>  
> =====

--

72, Ed, WE6W/qrp CW ONLY; Proud Member: QRP-L/ARCI/Norcal/ARS/AR  
<http://www.qsl.net/we6w> (Enjoying Ham Radio every day.)

-----  
Date: Wed, 3 Jun 1998 13:24:09 -0500 (CDT)  
From: Adrian Weiss <[aweiss@usd.edu](mailto:aweiss@usd.edu)>  
To: QRP-L@fidooo.CC.lehigh.EDU  
Subject: [12315] Rain on my Parade: the NORCAL Flame-War  
Message-ID: <Pine.SOL.3.94.980603125335.14846C-1000000@sunburst>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi again:

I came back from Dayton on this incredible high. Then I began reading the digests and got sick to my stomach. There are a lot of us who have worked very hard to make QRP what it is today. For us, there are no clubs, no presidents of clubs, no Boards of Directors, no kits, no accounting balances either for money or for time. For us, QRP consists of the world-wide gang of QRP'rs who share common values and a way of hamming. We support any efforts to enhance and further the QRP cause without respect to who is doing it. We do not criticise them for their chosen methods or strategies or whether they make or don't make any money. As I stressed in my Dayton "nordic saga" (thanks for that description George!), QRP has thrived because of the diversity of approaches and contributions to the cause, including the club designers and kitters and the commercial suppliers - neither get rich in the process.

Overall, the QRP gang has, since the beginning, closed ranks behind anyone or any group with an idea and the desire to contribute something to the cause. THE SPECIFICS DON'T MATTER!

For instance, these guys from the NJ QRPC are designing an antenna analyzer "that the average homebrewer is able to tackle in the shack without providing too much of a dent to the wallet." The thing uses a micro-controller hooked to the computer etc. Will I ever

make one? No, because I have my trusty old personally calibrated R/X Bridge that I can carry anywhere, whereas I don't have a laptop that I can take with me. But hey! George N2APB, Joe N2CX, and Clark WA2UNN have expended a great amount of time designing this thing and it looks pretty good. And a lot of QRP'rs will have a happier QRP experience because of it. Cummulatively, there is the investment of time at probably around \$95/hour judging from the qualifications and work-experience of these guys (who sound like geniuses to me!), for which they will be paid \$0.00. Then there is the contribution to the cause -- probably quite extensive. Then there are the many QRP'rs out there who will benefit. So what if I won't make one? That's my choice. But as for what they're doing, all I can say is: GREAT JOB - KEEP GOING -- AND THANKS FROM ALL OF US.

This is the attitude that has always given vitality to the QRP cause.

So, if there is such a great need for a 20m rig that meets your personal specs, or a 6m transceiver to fill a gap, and it is such a great idea, we all would definitely like to hear about it -- in your announcement that the design and/or kit is finally done and ready for shipment. And we all will say "job well done, THANKS!".

That's the way we QRP'rs have always done it. The specifics don't matter. The cause and the effort is all.

-----  
Date: Wed, 3 Jun 1998 11:25:20 -0700  
From: ki6ds@dpol.k12.ca.us (Hendricks, Doug)  
To: <n1fn@mtechnologies.com>  
Cc: <qrp-1@Lehigh.EDU>  
Subject: [12316] New Contest & Wrinkles  
Message-ID: <01bd8f1c\$f7d612a0\$630a0d0a@doug.dpol.k12.ca.us>  
MIME-Version: 1.0  
Content-Type: text/plain;  
    charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Marshall, first of all congratulations on your election to President of CQC. When I think of CQC, I think of an operating club, if I have to put a label on it. Clubs do different things in this wonderful hobby of ours, and I admire the work that the guys in the Colorado Club do with their many contests. I encourage you to keep coming up with these ideas for new contests and to keep fine tuning them. It is fun both as an operator and an

observer to try new things. My wife and I will be traveling this summer in our 5th wheel camper and I have no idea where I will be on July 19th for the contest, but I will be on the air!! I also applaud the idea that you can work the same station more than one time. I also really like contests that give a reward or bonus to the guy who goes out and operates in the field or does something extra to fulfill the theme of the contest. The Bubba, FYBO, Dog Sled?? (think that was the name), the ARS sprints, TAC contest, QRP to the Field, all have a theme or a special purpose, and that is one of the reasons that they are so much fun. And guys having fun is the name of the game.

Marshall, good luck in your new position, and hey, why don't you post the information on how to join the CQC and support your group? I and others would like to know.

72, Doug, KI6DS

-----  
Date: Wed, 3 Jun 1998 13:25:02 -0500 (CDT)  
From: Adrian Weiss <aweiss@usd.edu>  
To: "Michael A. Gipe" <mgipe@reliablemeters.com>  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [12317] Re: Beacon? at 10.104.6?  
Message-ID: <Pine.SOL.3.94.980603132438.14846D-1000000@sunburst>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

OK Mike -- sounds right to me -- :) / HI!

73, Ade

On Wed, 3 Jun 1998, Michael A. Gipe wrote:

> Date: Wed, 3 Jun 1998 10:25:16 -0700  
> From: "Michael A. Gipe" <mgipe@reliablemeters.com>  
> To: aweiss@usd.edu, Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
> Subject: Re: Beacon? at 10.104.6?  
>  
> This is the standard "I left the rig on and a book fell against the  
> paddles" beacon. Every licensed ham is required to set up one of  
> these beacon stations at least once in their career.  
>  
> Mike K1MG  
>  
>  
>  
>

> >An S6 signal has been sending dashes at about 35wpm on 10.104.6 for  
> >a long while. Is this a beacon of some sort?  
> >  
> >73, Ade  
> >  
>  
>

-----  
Date: Wed, 03 Jun 1998 13:38:25 -0500  
From: Mike - W0TMW <crucis@sky.net>  
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [12318] Mid America QRP Meeting Announcement: June 14th  
Message-ID: <35759821.D69A770D@sky.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

The first meeting of the Mid-America QRP Association (or whatever name we finally decide on), will be held on Sunday, June 14, 2:00PM at the Pizza Hut in Ft. Scott, KS. Any QRPer in the MO/OK/KS region is welcome to join us (or even out of the region is you're just passin' through.)

We also have a preliminary web page at: <http://nic.kanren.net/~maqrp/>  
We'd like to have y'all pay a visit.

Mike - W0TMW  
--

=====  
Mike Watson, W0TMW                      QCWA Mbr# 28651, MidContinent Chapter #35  
Raymore, Missouri, USA                Grid: EM28st, ARS# 352, QRP-L# 1849  
<http://www.sky.net/~crucis>      E-mail: crucis@sky.net    ARCI# 9647  
=====

-----  
Date: Wed, 3 Jun 1998 12:51:38 -0600 (CST)  
From: Bruce Rattray <rattray@gpfn.sk.ca>  
To: Adrian Weiss <aweiss@usd.edu>  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [12319] RE: Beacon? at 10.104.6?  
Message-ID: <Pine.SOL.3.91.980603124945.19920A-100000@gpfn1.gpfn.sk.ca>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII



Hello Ade!...took a listen just now (1850Z), 10.104.5 and am hearing what you are hearing but not moving S meter, signal just in and out of the noise but definitely there....using slanting dipole pointing mainly south...72 - Bruce(VE5RC)

On Wed, 3 Jun 1998, Adrian Weiss wrote:

> An S6 signal has been sending dashes at about 35wpm on 10.104.6 for  
> a long while. Is this a beacon of some sort?

>

> 73, Ade

>

>

>

-----  
Date: Wed, 3 Jun 1998 11:54:44 -0700  
From: k6hcj@juno.com (Marv Fagenson)  
To: qrp-1@Lehigh.EDU  
Subject: [12320] Ten Tec Argonaut II QRP \$500 plus extras!  
Message-ID: <19980603.115449.4422.0.k6hcj@juno.com>

I'm posting for Marv Druskoff, K6VIV. 818-753-5830. Work out the shipping details with him, pse.  
Argo II model 835 (Digital readout, WARC, Xtal Filter, manual) \$500 by itself or with 5A pwr supply, MFJ tuner, R/S fan dipole, possibly other extras included. \$650. According to May 98 73 magazine, the Argo II is rare and should sell for apx \$800

Marv Fagenson  
Amateur Radio K6HCJ  
k6hcj@Juno.com  
Van Nuys, CA

-----  
You don't need to buy Internet access to use free Internet e-mail.  
Get completely free e-mail from Juno at <http://www.juno.com>  
Or call Juno at (800) 654-JUNO [654-5866]

-----  
Date: Wed, 03 Jun 1998 15:13:57 -0400  
From: Fred Lesnick <flesnick@Quetico.tbaytel.net>  
To: qrp-1@Lehigh.EDU

Subject: [12321] [Fwd: Re: Beacon? at 10.104.6?]  
Message-ID: <3575A075.7BBB@tbaytel.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Adrian Weiss wrote:

>  
> An S6 signal has been sending dashes at about 35wpm on 10.104.6 for  
> a long while. Is this a beacon of some sort?  
>  
> 73, Ade  
It is 1907 z and stilll hearing the same thing at an s3,equal to the  
static level.Fred VE3FAL Thunder Bay,Ontario(They are calling for snow  
flurries)

-----  
Date: Wed, 03 Jun 1998 12:30:11 -0700  
From: Bob Hightower <ki7mn@dancris.com>  
To: qrp-1@Lehigh.EDU  
Subject: [12322] Ft Tuthill, again  
Message-ID: <Version.32.19980603122846.011ad690@mail.dancris.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

I've posted a couple of maps on my page for those thinking about coming to  
Ft Tuthill. I'll make a trip up there this weekend and try to get a more  
detailed layout of the group camping area, and post it when I get back.

<http://www.dancris.com/~ki7mn/tutfest.htm>

will get you to the page, and, at the bottom, the link to the maps.  
72,73  
Bob Hightower KI7MN

-----  
Date: Wed, 03 Jun 1998 15:33:37 -0400  
From: olyellr@iglou.com  
To: jmc@cnd.hp.com, qrp-1@Lehigh.EDU  
Subject: [12323] Re: Long wire feedline?  
Message-ID: <3.0.5.32.19980603153337.00828300@iglou.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

At 12:10 PM 6/3/98 -0600, you wrote:

>Could all of you QRP-L antenna masters give me some advice on my antenna and  
>feedline situation?

>

Hi Jerry!

You sound like a mirror of my experience. I ran a dipole on 40mtrs in my attic, bent like a U shape, and did fairly well. But I ran a similar antenna as you are contemplating now and the results have been well worth it.

My setup:

1st floor bedroom at back of house. City lot w/ tree in backyard.

Rig is an Icom706.

Antenna tuner is an MFJ 969, 160-6mtrs/roller inductor.

I used #24 bare copper wire and ran about 135' up thru the tree and across the backyard and alley and tied off at the top of a light pole about 35-40 tall.

```

      /-----|
      /         appr 100'
      /         |
      /appr30'   |pole
[] [] /-----|
house /-----fence and radials--|

```

Looks "something" like above....I'm no artist. :)

Anyway....Got about 35' going up to the top of the tree and about 100' across to the pole. I soldered a piece of #16 wire to the end at the house and brought it in the window and attached to the random wire post of the tuner.

>From the ground post of the tuner I ran a #10 wire out the window and to a 8' ground rod about 10 feet from the window. This same wire is attached to a chain link fence directly under the random wire, for added ground and radial.

Also from the ground post of the tuner I ran tuned(1/4wavelength) radial wires out the window and buried them directly under the random. I only ran one each for 80, 40, and 20 mtrs which seems to be enough, though I know the purists will say otherwise. That's ok with me.

Versus the indoor dipole, the receive is much better, due to being away

from the household electricals and the added height, etc. If I can hear'em I can work'em.

On any band, with credit to the tuner. And of course the gain is much improved also.

That's my experience and I hope it helps you. If I can answer any questions, I'll be glad too.

I have been thinking of running coax from the tuner and connecting it at the ground rod (shield) and starting the random run there, with an insulator. Am curious to see what others with more knowledge than me have to say about your question, my setup, and if coax has any advantage over the way I've done mine.

Good luck, and I'm looking forward to any and all replies.

72/73,  
Mike L.,

de KE4HLU  
FISTS #4139            QRP-L #1395  
99% CW OP...for the pure JOY of it!

-----  
Date: Wed, 03 Jun 1998 14:46:53  
From: Steven Weber <kd1jv@moose.ncia.net>  
To: qrp-l@Lehigh.EDU  
Subject: [12324] Removing core from flyback  
Message-ID: <3.0.3.16.19980603144653.116fd120@mailhost.ncia.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Howdy all,

One thing I've got plenty of and that's flybacks. So, I figured I'd remove the core from one and maybe try out one of these coax antennas everyone's been talking about recently.

Well, it's not as easy as one would think.

First I tried cutting the shell out from around the core. No go. Maybe if I had a band saw.

So, if you take a look at one of these things, the core is split and held together with a metal clip. Removing the clip allowed the top part to come

off easy enough, but the bottom part was held in with glue. So, I took the hack saw and cut a slot next to the core to brake the glue. After awhile, I was able to wiggle the core and get it out with out braking. I removed the spacer they had between the core ends, repalced the clip and taped the core together.

The core I removed is from a small flyback, maybe from a 19" set. Inside dimentionis of the open area is 1.45" x 0.5". Just big enough to wind 5 turns of RG-8X mini coax through.

The rest should be easy, just have to decide what band to make it for.

72,

Steve, KD1JV....In the White Mountains of New Hampshire

"Melt Solder"

-----  
Date: Wed, 3 Jun 1998 16:18:55 -0400  
From: "dave r" <elim@ime.net>  
To: <jmc@cnd.hp.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [12325] Re: Long wire feedline?  
Message-ID: <006e01bd8f2c\$d647bac0\$0ccc65ad1@default>  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

-----Original Message-----

From: Jerry McCollom <jmc@cnd.hp.com>  
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Date: Wednesday, June 03, 1998 2:18 PM  
Subject: Long wire feedline?

>Could all of you QRP-L antenna masters give me some advice on my antenna  
>and  
>feedline situation?  
>  
>I live in a covenant restricted neighborhood (I used to be president of the  
>association -- shoulda changed the covenants then :- ) Currently I've got  
>a  
>dipole in the attic, but I'd like to discreetly get a wire on the outside  
>of  
>the house.

>  
>So, I've got some of the #26 AWG "invisible" wire on order and plan on  
>stringing a long wire from the peak of our roof over to a tree in back of  
>the house. My calculations lead me to think I should be able to get a good  
>100' or more strung out. The question is how to feed it.  
>  
>Currently, I've about 70' of RG 213 running from an MFJ 949E tuner in my  
>basement hamshack up to the dipole in the attic. I'd like to use this to  
>feed the longwire out the side of an attic vent, if possible.  
>  
>Will it be sufficient to just ensure I've got a good ground on the coax  
>shield down in the hamshack, or do I need to go with a different feedline?  
>Do I need to feed it off the random wire side of the tuner instead of the  
>coax connector? Maybe I should backup and ask if doing a longwire outside  
is  
>going to be any better than my attic dipole? (It's a W9INN shortened 80-10  
>dipole).  
>  
>My web searching didn't help me answer any of these questions, so thanks  
for  
>any help you can offer!  
>  
>Jerry, W0MC  
>QRP-L #800

Hi Jerry,

I use a 100' long wire here and it gives me good service. My suggestion  
would be to bring the single wire into the attic and attach it there to a  
remote tuner such as the SCG Or LDG .. Then use multiple radial wires  
strung through the attic as an RF ground for the tuner.. then you can feed  
the tuner with your run of coax to the shack.

Should work ok.. I might suggest that you put a choke 1:1 balun at the input  
of the tuner just to keep rf off the shield of the coax..

Good Luck ,  
DAVE KC1DI

-----  
Date: Wed, 03 Jun 1998 20:19:08 +0000  
From: Ed Loranger <we6w@qsl.net>  
To: kd5ckp@bellsouth.net  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>

Subject: [12326] Re: Coupling your TX to your ANTENNA.  
Message-ID: <3575AFBB.492C@qsl.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

I understand completely -- You want a procedure. I'm good at writing procedures and won't let you down. But you will have to wait for me to do it. (Like my 160 Meter loop antenna.)

Since I haven't done this yet let me help get you started:

Let's try the 40 Meter band since everyone uses it.

My current setup transformed to 40 meters equates to the following:

1/10 wavelength at 40 Meters: 14 feet #12 AWG wire.  
1/100 wavelength at 40 meters: 1.4 feet #12 AWG wire.

OK. The circumference of 4" diameter PVC is about 12.56" 14 feet of wire on that pipe is about 13.4 turns. call it 14 turns. Spreading the wire over 1/2 spacing results in 28" pvc pipe used.

#### PROCEDURE 1.0 Wrap Wire on PVC.

Wrap 14 turns #12 AWG wire onto 30" length of 4" diameter pvc Pipe. Space turns 1/2 inch and Tape or epoxy in place. Or hacksaw marks into the pvc to hold the wire on the form.

##### 1.1

Wrap the 1.4 foot length of wire (Primary connected to transmitter) on a 1" diameter PVC pipe, 1/2 inch spacing for a total of about 5 turns. This pipe is about 12 inches long.

- 1.2 Slice a 7/16" diameter dowel of wood forming two disks, each about 1" thick and screw/dowel/or glue as end caps into the smaller pvc pipe. Drill a hole, centered in each end cap and pass a wooden 1/4 inch dowel of wood completely through the smaller pipe and glue together. You now have a "Hotdog on a stick!" This is the primary which you will slide into the larger PVC mounted coil. The larger Coil should have End Caps and the 1/4" wooden dowel should be able to pass through holes and support the primary.

- 1.3. Connect the Secondary output wires across a TRANSMITTING

capacitor tunable from 27 to about 350 pF. When tuned up you will have high voltage, suitable for the END-FED wire, SO DON'T TOUCH when transmitting!!!

- 1.4 Connect the primary wires directly to the output of your transmitter. No need for a balun. Just get some alligator clips to connect the center/ground to the primary wires.
- 1.5 At the design frequency, calculate a length of wire equal to a half-wavelength. on 7.04 MHz this is  $468/7.04 = 66' 6"$  Using 88% velocity factor for rubber coated wire the antenna should be 58'-6". Connect one end to one of the capacitor lugs, the other up high and out of the way. If you can't reach the 100' support post, just tie off and insulator made of plastic with drilled holes and run rope to it and the antenna support.

#### OPERATION 2.0

Connect up transmitter/receiver and a SWR meter. Listen to the 7.04

MHz band you designed the antenna for. Peak signals and noise with

the Transmitting capacitor and the primary centered under the Secondary

coil. Before transmitting, you might want to note what affect moving

the primary in/out has on signals.

OK. NOW WITH LOW POWER, about 1 watt, key the rig and check the VSWR on your meter. Do not re-adjust the Capacitor of the tuned

network yet. Instead, gently slide the primary away from the center

of the tuned network. Re-peak the SWR meter (Calibration) and re-check

SWR. Continue adjusting the primary, WRITING down SWR's measured as

you go. After characterizing the range of SWR's available (Read impedance

transformations), return the primary to center and adjust the tuning

capacitor while searching for best SWR with primary centered.

#### Success Factors 3.0

Your goal is to establish resonance in the secondary loop and verify

a good match to the rig using the Primary ONLY. Very minor



adjustments

in the Antenna capacitor are very acceptable and expected but I try to

stay close to resonance in the loop and have found with 5 KHz bandwidth

you can tune the capacitor for 1.0:1 VSWR without any problem.

Perform field measurements with a FS meter. I would recommend putting

a NE-2 bulb on antenna input wire. Just wrap both legs around the wire. Don't let the two legs get shorted together. Practice

tuning

up into the bulb! Fun to watch the "glow".

And now that I've written this up, I have something to remind me what I'm gonna do this Saturday.

Sunday will be at the Norcal meeting :)

-Ed

And Interested HAM wrote:

<snip for brevity>

> Ed I ain't sure I am that sharp. I got it until you started attaching  
> caps and dipping meters. See I am to new at this stuff. You say " OK go  
> get 4' of 4" PVC, 4' of 1" PVC and 25' of RG-8x coax. wrap it n turns x"  
> apart connect here and here stick a SO-239 on either end and check the  
> SWR" Then I'll start asking how does that work.  
> Yes I have a ARRL handbook & antenna book(got 'em from the library) tell  
> me what to read. HI HI  
>  
> 73 Friend

--

72, Ed, WE6W/qrp CW ONLY; Proud Member: QRP-L/ARCI/Norcal/ARS/AR  
<http://www.qsl.net/we6w> (Enjoying Ham Radio every day.)

-----  
Date: Wed, 3 Jun 1998 22:29:21 +0200  
From: "Peter Zenker DL2FI" <Peter\_DL2FI@csi.com>  
To: "'Internet Liste via PoP3'" <grp-l@Lehigh.EDU>  
Subject: [12327] SIERRA - Never tweak for power  
Message-ID: <000001bd8f2e\$fc48b00\$2438e8c3@ZENKERPN.perkin-elmer.com>  
MIME-Version: 1.0  
Content-Type: text/plain;

charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Hello QRP fellows,

Although I am not such a power fan, I tried some of the suggested mods to get more power out of my SIERRA. After lots of "fiddling" hours, I believe, I have some realistic results: the same mod with different settings of all those bandpassfilters could give all between 1 Watt and 4 Watt. That was when I used the Wattmeter and the Scope only. After that I tried all this things using an Spectrum Analyzer for each step. E.G. for the 28MHz modul I started to tune the 23MHz BPF for the Premixer, then tuned the 28MHz BPF of the TX Mixer. Noow I could see what happenned: No problem to tune to as much as 3.5 Watt, but NOT AT 28 MHZ. It was an extrem mixup of 26MHz (Xtal Oszillator, 28 MHz and lots of spurious. When I optimized for a clean signal, I got one of the best results I ever have seen for QRP Tx. All spurious and harmonics better then - 50 dBc (dB below carrier) GREAT!

The power for that cllean signals:

28 MHz = 2,0 Watt

21 MHz= 2,0 Watt

18 MHz= 2,2 Watt

14 MHz= 2,5 Watt

10 MHz= 2,5 Watt

7 MHz= 3,0 Watt

3.5 MHz= 2,3 Watt

1,8 MHz Modul not yet built

Some of you have seen the little DL-QRP-AG PA I showed at the Dayton QRP meeting.

It took me half an hour to install it into my Sierra: deinstall final Transistor, deinstall L10, Install PA at the backplane, keyline, +12V, ground, and two peaces of RG174 from the driver to the PA and back to the LPF. In the coax between driver and PA I installed a 1K Pot also at the backplane.

Results:

Signal at the Analyzer again all harmonics better then -50dBc

28MHz = max 7 Watt

21 MHz= max 7 Watt

18 MHz=max 7 Watt

14 MHz= max 7Watt

10 MHz = max 7Watt

7 MHz=max 7Watt

3,5 MHz = max 7Watt

Using the Pot I can chose every power between 50 Milliwatt and 7Watt. All Levels show exact the same picture at the Analyzer which is not so if you

use the standard driver pot.

Next time I will use my time better then for tweaking an object and will believe what Wayne, N6KR wrote in a posting: the Sierra PA has been calculated for 2-3 Watt. If you would like to have more power, change 4the 4Final Amplifier. (Not exact his words, but very near)

72 de Peter, DL2FI

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Date: Wed, 03 Jun 1998 16:28:13 -0500  
From: Jim <kj5tf@madisoncounty.net>  
To: qrp-l@Lehigh.EDU  
Subject: [12328] HF/MM on a fiberglass boat - help pse  
Message-ID: <3575BFED.914@madisoncounty.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

I have a 18' fiberglass inboard boat and want to use my Hamstick HF antennas. Anyone on the list have any suggestions on how to make a ground plane?

The 2M mag mount worked stuckon the engine, just enuf gp for that. :)

There is space under the hull where you put ski's and stuff... I might have 12 - 14' of space to wrk with.  
Perhaps some old RG8 coax (stiff eunf to keep from rolling up)?  
I have a couple ideas on how to run the coax center up above deck and clip on some kinda antenna mount.  
Maybe some auto/M mount could be attached topside, or some boat catalog has a better way?? Thanks for any advise, Jim

-----  
Date: Wed, 3 Jun 1998 17:02:27 -0500  
From: Tellefsen Bob-CNSE97 <cnse97@lmpsil02.comm.mot.com>  
To: Gipe Mike <mgipe@reliablemeters.com>  
Cc: QRP-L list <QRP-L@Lehigh.EDU>  
Subject: [12329] Re: 1997-1998 Foxhunt Fireside Literature Awards

Message-ID: <E726B6D1F2C7D1119AB900805FA74B3C4D4A01@s-il02-n.comm.mot.com>  
MIME-Version: 1.0  
Content-Type: text/plain

Many thanks, Mike. That beats a dozen curtain calls any day.

A deep and appreciative bow from the Golden Fox to your panel of judges and our Fox Hunting community/audience.

I hope our booking agent can negotiate a return engagement to the old 40 Meter Playhouse for the coming season.

My congratulations to Bruce, VE3RC, and Ed, WE6W, for their excellent efforts.

72, Bob N6WG  
The Golden Fox  
Recipient of the QRP-L 1996-1997 Certificate of Literary License

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Date: Wed, 3 Jun 1998 18:30:35 +0100  
From: Leon Heller <leon@lfheller.demon.co.uk>  
To: SBillingsley@usaninc.com  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [12330] Re: Identifying XTALS  
Message-ID: <1dy5xZA7gYd1EwCR@lfheller.demon.co.uk>  
MIME-Version: 1.0

In message <21E06269B00ED111BE9B00805F6D0FA327B59D@MAILSERVER1>, Sam Billingsley <SBillingsley@usaninc.com> writes  
>I have a source in town for a limited number of XTALS in the range 6MHz  
>to 12MHz. Various cases and lead types. I would like to build a CW XTAL  
>filter (probably ladder type) but need to determine the operating  
>characteristics before buying a bunch of these.  
>  
>Is there a simple bench test setup that I can use to identify if the  
>XTAL is designed for parallel or series operation? If so, is there a  
>simple way to determine the amount of shunt or series capacitance  
>needed?

Fundamental crystals like those are usually made for parallel operation.

Leon

--

Leon Heller: leon@lfheller.demon.co.uk <http://www.lfheller.demon.co.uk>  
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424

See <http://www.lfheller.demon.co.uk/dds.htm> for details of my AD9850 DDS system. See " " /diy\_dsp.htm for a simple DIY DSP ADSP-2104 system.

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Date: Wed, 03 Jun 1998 17:54:54 -0500  
From: Wayne Alexander <walexander@wwn.net>  
To: qrp-1@Lehigh.EDU  
Subject: [12331] Fw: Housecleaning!!  
Message-ID: <3.0.3.32.19980603175454.006af028@pop.wwn.net>  
Mime-Version: 1.0  
Content-Type: text/enriched; charset="us-ascii"

Maybe someone would like these.

>-----Original Message-----

>From: Don Bremer <<dbgb1@janics.com>

>To: zone@wwn.net <<zone@wwn.net>

>Cc: lholmes@juno.com <<lholmes@juno.com>; dholland@clandjop.com

><<dholland@clandjop.com>; k0gob@arrl.org <<k0gob@arrl.org>

>Date: Wednesday, June 03, 1998 8:09 AM

>Subject: Housecleaning!!

>

>

>>FREEEEEEEEEEEE!, FREEEEEE... To the FIRST person or persons who would like

>>to have a a large collection of QST, and other old publications, dating

>>back to the early 1920s... I few books older than THAT...The MUST be

>>pick-up only, since there are more than 700#.. I WILL NOT take time to

>>sort for certain years or issues... (since they are already boxed.)...

>> Our home is for sale and I must get this stuff out of the way ASAP...

>>Pick up in Joplin, MO... If you are interested, you can call at

>>417-623-6170... PLEASE FORWARD THIS NOTE TO YOUR HAM FRIENDS...

>> THANKS... Don Bremer... dbgb1@janics.com

>>

>

>

<paraindent><param>out</param>73

</paraindent>KB0PTE

Wayne

QRP-L #1058

FISTS # 4907

<http://www.wwn.net/walexander>

E-Mail Address: [walexander@wwn.net](mailto:walexander@wwn.net)

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End of QRP-L Digest 1111

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